

The Review of Metaphysics

A PHILOSOPHICAL QUARTERLY

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The Review of Metaphysics

A Philosophical Quarterly

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THE REVIEW OF METAPHYSICS

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ON KNOWLEDGE THROUGH CONNATURALITY *

I

The notion of knowledge through connaturality — that is, of a kind of knowledge which is produced in the intellect but not by virtue of conceptual connections and by way of demonstration — seems to me to be of particular importance, both because of the considerable part played by this kind of knowledge in human existence, and because it obliges us to realize in a deeper manner the *analogous* character of the concept of knowledge. Henri Bergson and William James, who were so much concerned, the one with intuition, and the other with experience, never did, I think, bring out and make use of the old notion of knowledge through connaturality. Had they done so, I assume that a number of things would have been clarified in their own teachings.

This notion of knowledge through connaturality is classical in the Thomist school. Thomas Aquinas refers in this connection to the Pseudo-Dionysius (*On Divine Names*, chapter II), and to the *Nicomachean Ethics*, Book 10, chapter V, where Aristotle states that the virtuous man is the rule and measure of human actions. I have no doubt that this notion, or equivalent notions, had, before Thomas Aquinas, a long history in human thought; an inquiry into this particular chapter in the history of ideas, — which would perhaps have to take into account such philosophers as Ramanuja, and the Indian

* Read at the second annual meeting of the Metaphysical Society of America on February 24, 1951, at Barnard College, New York City.

school of *bhakti*, — would be of considerable interest. I did not embark on such historical research; the question for me was rather to test the validity of the notion of knowledge through connaturality, as elaborated in the Thomist school, and more systematically to recognize the various domains to which it must be extended.

To begin with, I shall refer to a basic distinction made by Thomas Aquinas, when he explains¹ that there are two different ways to judge of things pertaining to a moral virtue, fortitude for instance. On the one hand we can possess in our mind moral science, the conceptual and rational knowledge of virtues, which produces in us a merely intellectual conformity with the truths involved. Then, if we are asked a question about fortitude, we shall give the right answer by merely looking at and consulting the intelligible objects contained in our concepts. A moral philosopher may possibly not be a virtuous man, and yet know everything about virtues.

On the other hand we can possess the virtue in question in our own powers of will and desire, have it embodied in ourselves, and thus be in accordance with it, or co-natured with it, in our very being. Then, if we are asked a question about fortitude, we shall give the right answer, no longer through science, but through inclination, by looking at and consulting what we are and the inner bents or propensities of our own being. A virtuous man may possibly be utterly ignorant in moral philosophy, and know as well — probably better — everything about virtues, through connaturality.

In this knowledge through union or inclination, connaturality or congeniality, the intellect is at play not alone, but together with affective inclinations and the dispositions of the will, and is guided and directed by them. It is not rational knowledge, knowledge through the conceptual, logical and discursive exercise of Reason. But it is really and genuinely knowledge, though obscure and perhaps incapable of giving account of itself, or of being translated into words.

St. Thomas explains in this way the difference between the knowledge of divine reality acquired by theology and the

¹ *Sum. theol.*, II-II, 45, 2.

knowledge of divine reality acquired by mystical experience.² For the spiritual man, he says, knows divine things through inclination or connaturality: not only because he has learned them, but, as the Pseudo-Dionysius put it, because he suffers them.

As I said at the beginning, knowledge through connaturality plays an immense part in human existence, especially in that knowing of the singular which comes about in everyday life and in our relationships of person to person. Yet it is not with this everyday practical experience that I shall be concerned today. For the sake of brevity, I would like only to outline in a few words its role in some particular typical fields of human knowledge.

II

It is especially with respect to mystical experience, as witnessed by Christian contemplatives, in whom alone, according to Bergson, it came to full fruit, that the Schoolmen developed their theory of knowledge through connaturality. I shall not dwell on this point, which is more theological than philosophical. Suffice it to note that they described mystical contemplation as grace-given or supernatural contemplation, because depending both on faith and charity, and on a special inspiration from God who inhabits the soul. They observed that obviously a fruitive experience of the deity cannot be provided by our concepts or ideas, which, as true as they may be, make us know divine things at a distance, and through the analogy of creatures. Consequently, such supra-conceptual knowledge can come about only through connaturality, through the connaturality that love of charity, which is a participation in God's very love, produces between man and God. The great gnoseological achievement of the best commentators of Thomas Aquinas, John of St. Thomas for instance, was to show that in mystical experience this love grows into an *objective means* of knowing, *transit in conditionem objecti*, and replaces the concept as intentional instrument obscurely uniting the intellect with the thing known, in such a way that man not only experiences his love, but, through his love, that precisely which

² *Sum. theol.*, I, 1, 6, ad 3.

is still hidden in faith, the *still more* to be loved, and to be tasted in love, which is the hidden substance of faith. Then, as St. Thomas puts it, "at the summit of our knowledge we know God as unknown," *tanquam ignotus cognoscitur*, that is, He is known, through love, as infinitely transcending any human knowledge, or precisely as God.

* * *

There is, I think, another kind of mystical experience, which, in contradistinction to the one I just mentioned, may be called natural mystical experience, and an example of which we can find in Plotinus and in the classical schools of Indian contemplation. I can only state in a few words the conclusions of a certain amount of research I did on the matter. Here again, to my mind, we have to do with a particular type of knowledge supra-conceptual and through connaturality. But the connaturality in question here is merely intellectual, and the essential part played by the will consists in forcing the intellect inwards, against the grain of nature, and in obliging it to empty itself of any particular representation. The reality to be experienced is the very Existence, the very *Esse* of the Self in its pure metaphysical actuality, Athman, and as proceeding from the One Self: and it is by means of a supreme effort of intellectual and voluntary concentration, sweeping away any possible image, recollection or idea, any passing phenomenon and any distinct consciousness, in other words, it is through the void that the intellect is co-natured to the unconceptualizable spiritual reality of the thing known.

III

Another typical instance of knowledge through connaturality appears in Poetic Knowledge. Since German Romanticism and since Baudelaire and Rimbaud, poetry has become self-aware to an unprecedented degree. Together with this self-awareness, the notion of poetic knowledge has come to the foreground.

The poet has realized that he has his own way, which is neither scientific nor philosophical, of knowing the world. Thus the fact of that peculiar kind of knowledge which is poetic

knowledge has imposed itself upon philosophical reflection. And it would be no use to try to escape the problem by considering poetry a set of pseudo-statements — with no meaning — or a substitute for science intended for feeble-minded people. We must confront in a fair manner the fact of poetic experience and poetic intuition.

Poetic experience is distinct in nature from mystical experience. Because poetry emanates from the free creativity of the spirit, it is from the very start oriented toward expression, and terminates in a word proffered, it wants to speak; whereas mystical experience, because it emanates from the deepest longing of the spirit bent on knowing, tends of itself toward silence and internal fruition. Poetic experience is busy with the created world and the enigmatic and innumerable relations of existents with one another, not with the Principle of Being. In itself it has nothing to do either with the void of an intellectual concentration working against the grain of nature or with the union of charity with the subsisting Love.

Yet poetic experience also implies a typical kind of knowledge through connaturality. Poetic knowledge is non-conceptual and non-rational knowledge; it is born in the pre-conscious life of the intellect, and it is essentially an obscure revelation both of the subjectivity of the poet and of some flash of reality coming together out of sleep in one single awakening. This unconceptualizable knowledge comes about, I think, through the instrumentality of emotion, which, received in the preconscious life of the intellect, becomes intentional and intuitive, and causes the intellect obscurely to grasp some existential reality as *one* with the Self it has moved, and by the same stroke all that which this reality, emotionally grasped, calls forth in the manner of a sign: so as to have the self known in the experience of the world and the world known in the experience of the self, through an intuition which essentially tends toward utterance and creation.

IV

Finally moral experience offers to us the most wide-spread instance of knowledge through connaturality. As we have

noticed, it is in the experiential — not philosophical — knowledge of moral virtues that Thomas Aquinas saw the first and main example of knowledge through inclination or through connaturality. It is through connaturality that moral consciousness attains a kind of knowing — inexpressible in words and notions — of the deepest dispositions — longings, fears, hopes or despairs, primeval loves and options, — involved in the night of the subjectivity. When a man makes a free decision, he takes into account, not only all that he possesses of moral science and factual information, and which is manifested to him in concepts and notions, but also all the secret elements of evaluation which depend on what he is, and which are known to him through inclination, through his own actual propensities and his own virtues, if he has any.

But the point on which I should like to lay stress deals with that most controversial tenet in moral philosophy, Natural Law. I don't intend to discuss Natural Law today, I shall only emphasize an absolutely essential element, to my mind, in the concept of Natural Law. The genuine concept of Natural Law is the concept of a law which is natural not only insofar as it expresses the normality of functioning of human nature, but also insofar as it is *naturally known*, that is, known through inclination or through connaturality, not through conceptual knowledge and by way of reasoning.

You will allow me to place myself in the perspective of a philosophy of Natural Law: I do so not in order to assume that you take such a philosophy for granted, but in order to clarify the very idea of Natural Law. My contention is that the judgments in which Natural Law is made manifest to practical Reason do not proceed from any conceptual, discursive, rational exercise of reason; they proceed from that *connaturality or congeniality* through which what is consonant with the essential inclinations of human nature is grasped by the intellect as good; what is dissonant, as bad.

Be it immediately added, to avoid any misunderstanding, first, that the inclinations in question, even if they deal with animal instincts, are essentially human, and therefore, reason-permeated inclinations; they are inclinations refracted through the crystal of reason in its unconscious or pre-conscious life.

Second, that, man being an historical animal, these essential inclinations of human nature either developed or were released in the course of time: as a result, man's knowledge of Natural Law progressively developed, and continues to develop. And the very history of moral conscience has divided the truly essential inclinations of human nature from the accidental, warped or perverted ones. I would say that these genuinely essential inclinations have been responsible for the regulations which, recognized in the form of dynamic schemes from the time of the oldest social communities, have remained permanent in the human race, while taking forms more definite and more clearly determined.

But let us close this parenthesis. What are the consequences of the basic fact of Natural Law being known through inclination or connaturality, not through rational knowledge?

First: not only the prescriptions of positive law, established by human reason, but even those requirements of the normality of functioning of human nature which are known to men through a spontaneous or a philosophical exercise of conceptual and rational knowledge are not part of Natural Law. Natural Law, dealing only with regulations known through inclination, deals only with principles *immediately* known (that is known through inclination, without any conceptual and rational medium) of human morality.

Second: being known through inclination, the precepts of Natural Law are known in an *undemonstrable* manner. Thus it is that men are unable to give account of and rationally to justify their most fundamental moral beliefs: and this very fact is a token, not of the irrationality and intrinsic invalidity of these beliefs, but on the contrary, of their essential *naturality*, and therefore of their *greater* validity, and of their *more than human* rationality.

Third: this is so because no conceptual and rational exercise of human reason intervenes in its knowledge of Natural Law, so that human reason knows Natural Law, but has no part, either in causing it to exist, or even in causing it to be known. As a result, uncreated Reason, the Reason of the Principle of Nature, is the only reason at play not only in

establishing Natural Law (by the very fact that it creates human nature), but in *making Natural Law known*, through the inclinations of this very nature, to which human reason listens when it knows Natural Law. And it is precisely because Natural Law depends *only* on Divine Reason that it is possessed of a character naturally sacred, and binds man in conscience, and is the prime foundation of human law, which is a free and contingent determination of what Natural Law leaves undetermined, and which obliges by virtue of Natural Law.

Philosophers and philosophical theories supervene in order to explain and justify, through concepts and reasoning, what from the time of the cave-man men have progressively known through inclination and connaturality. Moral philosophy is *reflective* knowledge, a sort of after-knowledge. It does not discover the moral law. The moral law was discovered by men before the existence of any moral philosophy. Moral philosophy has critically to analyze and rationally to elucidate moral standards and rules of conduct whose validity was previously discovered in an undemonstrable manner, and in a non-conceptual, non-rational way; it has also to clear them, as far as possible, from the adventitious outgrowths or deviations which may have developed by reason of the coarseness of our nature and the accidents of social evolution. Eighteenth Century rationalism assumed that Natural Law was either discovered in Nature or a priori deduced by conceptual and rational knowledge and from there imposed upon human life by philosophers and by legislators in the manner of a code of geometrical propositions. No wonder that finally "eight or more new systems of natural law made their appearance at every Leipzig booksellers' fair" at the end of the XVIIth Century, and that Jean-Paul Richter might observe that "every fair and every war brings forth a new Natural Law."³ I submit that all the theories of Natural Law which have been offered since Grotius (and including Grotius) were spoiled by the disregard of the fact that Natural Law is known through inclination or connaturality, not through conceptual and rational knowledge.

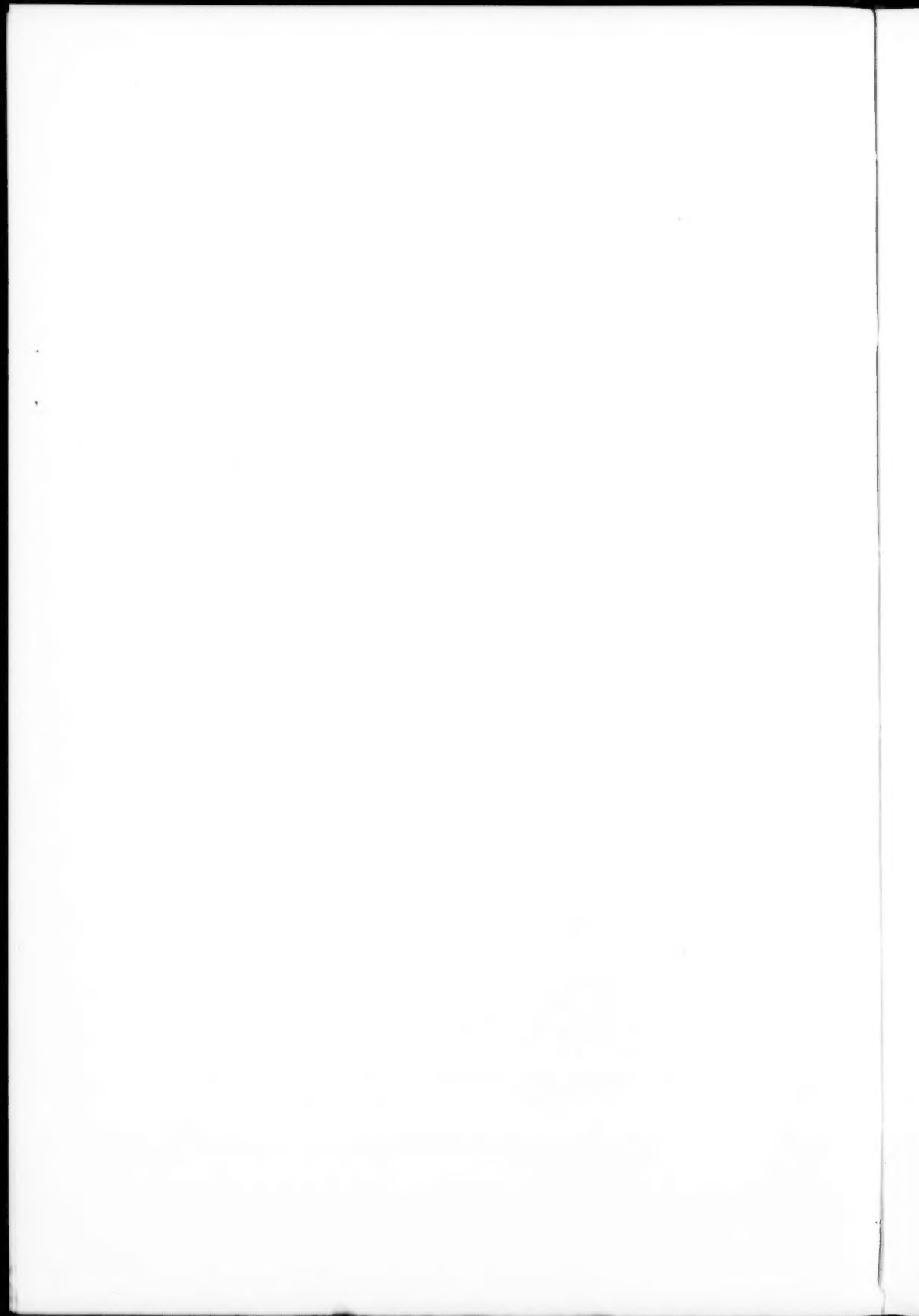
³ Rommen, *Natural Law*, p. 106.

V

I think that the critique of knowledge is part of metaphysics, and that the recognition and analysis of that kind of knowledge which is knowledge through connaturality pertain to the object of the critique of knowledge. But knowledge through connaturality has nothing to do with metaphysics itself: metaphysics proceeds purely by way of conceptual and rational knowledge. Like all rational knowledge it presupposes sense experience; and insofar as it is metaphysics, it implies the intellectual intuition of being *qua* being. But neither in this intellectual intuition nor in sense-perception is there the smallest element of knowledge through inclination. In its rational development as in its primal intuitions metaphysics is purely objective. If one confuses the planes and orders of things, if poetic knowledge or mystical experience or moral feeling claim to become philosophical knowledge, or if a philosophy which despairs of reason tries to capture those kinds of knowledge through connaturality, and to use them as an instrument, — everyone loses his head, knowledge through inclination and metaphysics are simultaneously spoiled.

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THE IDEA OF PROGRESS

Analyses of the nature of human progress have been appearing in such quantity and variety that it now seems feasible to approach the problem of progress through the diverse conceptions that are held of it. Such an approach may help to throw light upon the confusion which recent writings have brought to the concept of progress. This concept is a composite of two elements: it is both a summary of judgments on the quality of human experience and a component of ideals for the molding of that experience. In neither aspect is the concept of progress autonomous: in both aspects it is dependent upon the methods and values at work in the elaboration of such judgments and ideals. It is hardly surprising, then, that the concept of progress has manifested little of the stability deriving from independent logical analysis but has changed along with the great changes in the general framework of thought. Consequently, some consideration of the general development from 19th to 20th century thinking, a development which has been decisive for the concept of progress, is required for an understanding of the current forms which the concept takes.¹

For men of the 19th century, the world was ordered by a whole system of concrete universals: ideals and the empirical world were simply two aspects of the same reality; ideals described an empirical reality which included them as its actual cohesive power. This character is reflected in the fact that the most influential thinkers of the last century combined, despite the rise of the specialized disciplines, sociological,

¹ By '20th century thought' I do not, either here or later, mean all the lines of thinking being pursued in our age. Rather, I refer to those complexes of ideas which have risen to prominence during this century and which seem to be particularly appropriate to the general conditions of the time. Thus by 20th century thought, in this sense, I should not include either Marxism or British idealism, but I should include philosophies of experience or process, modern Protestant thought, Catholic personalism, existentialism, the neo-Kantian philosophies of history, and the sociology of knowledge.

historical and philosophical approaches to a reality which in social, temporal, and cosmic aspects they conceived to be homogeneous. This unity has been dissolved in 20th century thought. The results of sociological and historical investigations of social reality have undermined the absolute validity of ideals. Epistemology has tended to undermine the meaningfulness of the objective world. Even so, attempts to revivify the old ideals by re-synthesizing ideas and existence are still being made. Historicism has been continuously concerned with its own *Ueberwindung* by the establishment of an absolute value;² sociology has continued to search for general meanings, whether in the form of a sociology of knowledge or the culture-dynamics of a Sorokin;³ philosophy has concentrated its attention upon existence or experience or process: and the prominence of the philosophy of history and of philosophy as history which these developments imply are testimony of the tendency to replace nature by man so that man is the arena in which the re-integration of the different levels of reality is to be sought. Values which took a hard and fast form in the connection between general idea and particular existence in the 19th century have been disengaged through dissociation. The examination of historical and social experience and ideas in their own terms has made possible a new assessment of what is essential and what contingent in the general concepts of western man. At the same time even the subsequent integrative procedure, i.e. the historizing of ideas and the philosophizing of experience, has contributed further to such an assessment by including as the necessary basis for thought all of man's history and experience within its purview.

If it is realized that the concept of progress has been a function of these general characteristics and has developed along with them, then one important source of confusion may be uncovered. The particular idea of progress which was expressly set at the apex of 18th and 19th century systems

² See M. Mandelbaum, *The Problem of Historical Knowledge*; K. Heussi, *Die Krisis des Historismus*. (For complete data on all books referred to in footnotes see the bibliography at the end of the article.)

³ K. Mannheim, *Ideology and Utopia*; P. Sorokin, *Social and Cultural Dynamics* (4 vols., New York, 1937), abbreviated version in Sorokin's *The Crisis of Our Age*.

of thought has come to be known as the classic idea of progress and consequently has tended to be identified with the general concept of progress. When this particular idea of progress has been rejected, as, in general, it has been, it has seemed as if the whole concept of progress was invalidated. Actually, however, the idea of progress as defined by 19th century presuppositions has been criticized in terms of a new set of presuppositions, which has in turn set up its own idea of progress.⁴

In general, it has been the older notion of progress as a unitary concept expressing both the law of the historical social process and an ideal which inspired men's actions in that process which has been disowned. This shift was already begun during the 19th century, when with *the dismal science* of political economy and the merger of ideas of progress and evolutionary conceptions, the laws of nature and history were to some extent detached from men's strivings. These now had to assert themselves within the limits set by laws of nature rather than through laws which were homogeneous with men's ideals, as the men of the 18th century had envisioned the process.⁵ Hegel and Marx stand as transitional figures in this development. But while the 19th century laws of life and society were not of the same kind as the stuff of men's ideals, still they were compatible in their ends. It has remained for our own century to press home the division. From different sides, thinkers have unanimously attacked the validity of absolute law which guaranteed the unity of the teleological nature of social process and the realistic nature of men's ideals, and it was

⁴ The ambiguous status of the modern scions of the 19th century progressives can hardly have more graphic attestation than the case of the Teggart-Hildebrand anthology on the idea of progress, the second edition of a work dedicated to an idea in which the editors profess not to believe. Although the anthology itself is patterned very closely on Bury's history of the classic idea of progress — and Bury was a whole-hearted believer in this idea — both Teggart and Hildebrand, the former most vehemently, reject this form of progress in favor of a belief in "the possibility of progress," which, as they admit, is quite a different thing. See F. Teggart, *Theory of History*, and Hildebrand's introduction in F. Teggart and G. Hildebrand, *The Idea of Progress*.

⁵ For a recent critical analysis of the 18th century idea of progress, see Charles Frankel, *The Faith of Reason*.

precisely this kind of law upon which the idea of progress had been based. Historians have disputed, on the basis of the record, that the past reveals a linear process of the increasing realization of human values, but they have admitted that the past does reveal a constant, although not uninterrupted growth in the techniques of power, which must be accounted progress of a kind. Similarly, sociologists like Mannheim have emphasized that progress of this kind has not only made society increasingly impervious to ideals of progress, defined in terms of moral purpose exercised in rational control, but has tended to undercut the validity of the ideals as ideals.⁶ Much of recent philosophy has attacked the problem from the other side and come to analogous conclusions: the nature of the ideal of progress is such that it demands an arena of activity indifferent or even hostile to it for its very validity as an ideal. The union of these two approaches in the philosophy of history or the philosophy of experience has yielded the commonly agreed conclusion that progress does not exist as a past pattern of social behavior nor as a projected hypothesis for the future but that it is tied essentially to a decision in the present to solve the problems of the present. The past then is relevant not because it manifests the direction of human development and thereby points out the line which a progressive solution should take, but because it indicates the flexibility and malleability of human affairs and furnishes the subject matter for present decisions, both in the obvious sense of contributing to the understanding of the ingredients and status of present problems and in the fundamental sense of providing a negative pole for the assessment of the decision. For what is basic in this conception is that a necessary condition of progress is not conformity to a law or tendency already exhibited in a previous historical pattern but is rather departure from the past, the building into history of something new: if decision is the determinant, creativity is the measure of progress. What are the implications of this position?

Since progress requires creation, it requires too the conditions for creation, that is, it must be individual, free, and

⁶ K. Mannheim, *Man and Society in an Age of Reconstruction*, and *Ideology and Utopia*.

concrete. The individualizing character of modern thinking, of which Kallen's book is an example, infiltrates the concept of progress. The difficulties in establishing the coherence of the objective world have reached even into man's own world to raise difficulties in establishing the coherence of social groups and institutions. Social entities are now generally conceived in one of two ways. Either they are viewed as coincidences of individuals, with all the moral attributes and capacities of the person — democracy is a useful concept for this alchemy — or they are seen as Franksteins, constructed in the process of man's self-alienation and consequently deprived of both the humanity and the divinity which were formerly considered to inhere in them.⁷ In either conception, the individual and the absolute are left in direct confrontation for the process of infusing human affairs with meaning. Only individuals and societies conceived of as coincidences of individuals bear values; hence only such individuals are the agents of progress, and this in an ultimate sense, for each individual is granted the right of his own absolute. Consequently, since individuals are discontinuous in time, so is progress. This discontinuity means much more than the tenet that progress has no linear history. It means that since progress becomes a measure of the success which an individual has in his communion with his absolute, the history of progress becomes an intermittent series of eternal moments incommensurable with one another in content. In that each individual may progress in terms of his own pattern of self-fulfillment there may be some kind of progress, but the problem is then whether there can be a progress of such progresses. This problem is often resolved through the notion of a total Absolute, conceived in the alternative terms of eternal Being⁸ or of Humanity,⁹ which embraces all the individual absolutes and is progressively revealed or realized with every

⁷ Horace Kallen's *Patterns of Progress* provides the clearest example of this attitude toward society: the application of the idea of progress to society as a separate entity has worked oppressively on man; genuine social progress can only result from the confluence of individuals' wills to progress in a free society.

⁸ E.g., B. Croce, *History as the Story of Liberty*.

⁹ See Hajo Holborn, "Wilhelm Dilthey and the Critique of Historical Reason," in *Journal of the History of Ideas*, XI (1950), pp. 93-118.

contact. Beyond such a metaphysical coherence, the only secular commensurability which may serve as a criterion for the progress of individual progresses lies not in any community between the individual progresses themselves but in the necessary conditions for them. The formal criteria of this kind that are usually emphasized in modern thought are liberty and action. Liberty is thought essential to progress not only as a required moral component of the individual's creation which constitutes progress but also as a necessary, objective, social condition for this individual progress. Similarly, concrete action is considered not only a necessary attribute defining individual progress but also as a condition for the rooting of that progress in traceable human experience. Thus the conditions of individual liberty and individual activity are necessary not only to the personal moral essence of progress but also to its transpersonal existence. These conditions indicate that progress is not held to be a reliable description of human experience or an absolute conceptual ideal, as it was once held to be. Rather do these two aspects of reality seem to be united in a new way; progress now represents the new merger of objective world and subjective ideal in the new context of time and on the new plane of individual process.¹⁰

¹⁰ The emphasis upon the individual, free, activist nature of progress which is characteristic of modern thinking is most explicitly spelled out in H. Kallen's *Patterns of Progress*, which is, to my knowledge, the only work by a modern philosopher which has progress as its main theme (I exclude the work of the French idealist, Leon Brunschvicg, *Le progrès de la conscience dans la philosophie occidentale* (2 vols., Paris, 1927) from this interpretation of 'modern'). The movement of progress to the periphery of philosophical discussion is in itself not without significance. Kallen's argument, which is clearly an expression of the pragmatic school, insists that the essence of progress is embodied in *the will to progress*, which signifies the determination to advance beyond the barriers thrown up by the resistance of things to man's energies along directions selected from the process of experience at each critical point. Thus, "first and last progress is an ideal" (p. 5), but in the sense not of an independent realm of ends but rather of a relationship of means to ends which constitutes "one concrete and seamless event"; decisive is "the distance from, not the distance to": "hence the going is the goal." (p. 27) The postulation of final, exclusive ends, with their implication of definite means can apply, according to Kallen, only to society, conceived as an

The main elements in the modern concept of progress would seem to be then, first, advancement in knowledge, based upon the cumulative nature of thought; secondly, what Kallen calls "the meliorist posture of the will of man,"¹¹ that is, the simple drive by individual men to realize their ends through concrete activity; and thirdly, the freedom, both external and internal, required for such activity. Now these three elements were likewise components of the 18th century idea of progress. This indicates the continuity of what Kallen well calls "this latest of the humanist dispositions"; it indicates that certain of the values assumed in the modern concept of progress are the same as those explicit in the 18th century idea of progress. What has changed is their setting. For the 18th century the identification of man's aims with nature's workings and the subscription to a viable theory of society made it possible to draft a general law of substantive progress which was yet compatible with the liberty of the individuals to whose thought and social activity such progress was ultimately due. For our own century, the temporal pattern mediating between macrocosm and microcosm has been denied. The locus of this putative

illusory entity to bear an illusory teleological pattern; it cannot apply to the individual and his free decisions, the true vehicles of progress.

The tendency is also evident in Whitehead's chapter on "Prerequisites for Social Progress" in *Science and the Modern World*, where matter is replaced by organism, where each organism has pattern and value, and where progress depends upon the full recognition of these values; the present crisis is attributable, in this conception, to the habit of abstraction which separates the perceiving mind and the field of perception and thereby devalues the organism; for man the two are combined only concretely, in "the individualisation of the creative activity." "The pattern of the higher organism has retreated into the recesses of the individualised activity. It has become a uniform way of dealing with circumstances." (pp. 201-202)

Croce's main recent discussion of progress appears in a chapter entitled, significantly, "History as Action," in *History as the Story of Liberty*, pp. 50-54.

In Tillich, progress is associated not with the Logos, but with the Kairos, a principle characterized by the personal creative decisions of man. P. Tillich, *The Interpretation of History*.

For Collingwood, in his *Idea of History*, the position is less clear, since to him history is the history of thought. Yet even he defines progress in activist terms as the successive solutions of related problems.

¹¹ H. Kallen, *Patterns of Progress*, p. 78.

pattern is history, and its denial has taken the form of any one of a number of judgments upon the course of human history. For some, history does show progress in certain fields, notably that of techniques, and this progress amounts to a necessary law in view of its relationship to the nature of human knowledge; but these fields are now rigidly marked off from those activities in which essential values are realized, and here necessary progress in history is rejected.¹² For others, progress is admitted definition of any kind of irreversible, integrated development.¹³ For a third group, even this is denied: history reveals no general pattern at all.¹⁴ In all these conceptions, the path by which individual progress can be made effective for humanity is blocked, while in the ideas of a fourth group, who represent 20th century adumbrations upon collectivist thought, the road from macrocosmic progress to the individual is equally cut.¹⁵

¹² For a recent, exhaustive discussion of the subject along these lines see *Progrès technique et progrès moral*, the published translations of the meeting of European intellectuals held on this topic under the auspices of the *Rencontres Internationales de Genève* in 1947. Despite individual variations and accommodations in detail the general line of division in the discussions lay between Marxists and non-Marxists. While there was general agreement on the fact of inevitable technical progress, the Marxists held essentially to the 19th century position that technical and moral aspects were compatible components of a homogeneous idea of progress, while the non-Marxists insisted on the incompatibility of the two aspects, thereby dissolving the integral idea of progress and applying it now primarily to moral or spiritual factors in man, the progress of which was considered to be doubtful in the past and even more doubtful in its present prospects. For an expansion of the Marxist position, see F. Friedmann, *La crise du progrès*.

as an historical concept, but only in the de-valued form of a

¹³ See J. Huizinga, *In the Shadow of To-Morrow* and Hugh Miller, *History and Science*.

¹⁴ E.g., F. Teggart, *Theory of History*.

¹⁵ The importance of the mediative role of society in the concept of progress is strikingly shown in the case of Otto Hintze, one of the few modern historians to endorse the idea of general progress in history. This he did by accepting from the 19th century historian, Leopold von Ranke, the distinction between the intensive nature of the progress of "civilization" (the social realm of techniques) and the extensive nature of the progress of "culture" (the social realm of the spirit), a position clearly conditioned by Hintze's theory of society, which identified the community

Thus progress now appears only within the individual pattern or within the cosmic pattern; the relationship between them is no longer considered as a normal one, inexorably realizing itself in historical time between two poles which stand outside of historical time, but rather as a convulsive one, a sporadic, momentary, immediate, and complete union, which stands outside of history, of stages of two patterns which stand within time. When this union takes place, there is progress in the individual pattern which develops its own values and in the cosmic pattern which develops all values, but not in the relationship between them, for here fulfillment either is or is not.

It remains to ask whether the continuous elements in the concept of progress are sufficient to define it, so that we may take it for a universal value with a changing temporal content. The question is important, for it must be asked of several of the inherited values to which our age clings. In the case of progress, it must be owned that the present meaning is different in kind from its original meaning, that the concept of progress has been emasculated. For what has been essential to the notion of progress has been the idea of the realization in time of a teleology conceived as out of time; the agents of the realization, according to this basic conception, are individual men and the media of their action the institutions of society. These institutions, variously in the form of Church, Society, State, Nation, or Class, were at once the instruments of man's freedom and the embodiment of the teleological meaning; as such they objectified the thoughts and actions of individual men, they guaranteed these thoughts and actions as a usable heritage for the future, they made progress toward value an ascertainable reality. It is the elaboration of this essential aspect that constitutes the real history of the concept of progress in western man and made possible the idea of the progress of

with civilization and the individual with culture and explained human development by the tension and inter-action between them. What was decisive here was his conviction that this development is eminently knowable, since the principle of evolution governed the movement of civilization and that of dialectic the movement of culture. See his "Troeltsch und die Probleme des Historismus," in Fritz Harting, ed., *Otto Hintze: Zur Theorie der Geschichte*.

progress. From the classical development of teleology as the explanation of existence in a realm beyond existence, through the Christian provision for the break-through of the divine teleology into the world of time, partially realizable through the seed that was the Church, to the identification of teleology with existence (although not with all the phenomena of existence),¹⁶ totally realizable through a libertarian society, in the classic idea of progress of the 18th and 19th centuries, the history is one of increasing human participation in the achievement of an external framework of meaning. Our own age has carried on the general tendency of this history to the point where, dialectic-wise, it has begun to generate its own opposite: it has further increased the human participation to such a degree that it has over-run and abolished all external frames of meaning. Teleology has become temporalized. The impact of this development is attested to by recent Christian thinkers like Berdyaev and Reinhold Niebuhr, who in reaction move both the center of meaning and its realization clean out of time and history.¹⁷ Both of these lines of modern thought mark equally the turn from what is essential in the concept of progress. This essence is the creation of commonly comprehensible and commonly approved goals and the establishment of commonly accessible means to ensure that men of the contemporary generation and their heirs will work together for the achievement of tasks which transcend individual powers or the individual span of life. Teleology out of time, a logically structured value, creates this kind of goal, realization in historical rather than personal time creates this kind of means. Temporalized teleology and individual means do not, as the failure suffered by the neo-Kantian philosophers of history in their struggle to attain objective knowledge of the past strikingly shows.¹⁸ The continuation of those elements in the

¹⁶ For this distinction, see C. Frankel, *The Faith of Reason*.

¹⁷ Niebuhr does assert that the Absolute creates some progress in history, but since this is defined as the expansion of areas of freedom, history witnesses not progress itself but the growth of conditions for a realization of meaning which lies out of history. R. Niebuhr, *Faith and History*.

¹⁸ See Fritz Kaufmann, *Geschichtsphilosophie der Gegenwart* and Maurice Mandelbaum, *The Problem of Historical Knowledge*.

concept of progress which assert the possibility and the desirability of free creative activity means that under the ægis of progress men are still called to work toward the fulfillment of meaning in time, but in the context of modern thought this becomes a call to manifest the infinite variety of life through the development of individual patterns of meaning in the achievement of tasks which can be worked only by individual powers and within the individual span of life. But then progress is simply reduced to moral action and it is no longer clear that there remains anything distinctive about it. Under present conceptions, progress has become an anachronism, now in use as a parenthesis to bring the overtones of a lost meaning to the support of present demands.

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LEIBNIZ AND THE TIMAEUS *

It is rather surprising to observe that while Leibniz's indebtedness to Aristotle has been studied in about a dozen books and articles, some of which being very thorough and scholarly dissertations, his Platonism has been touched upon so far only incidentally and never in a sufficiently complete and careful manner.¹ Among the many internal and external reasons for this strange neglect of one of the fundamental sources of Leibniz's philosophical doctrine and of one of the most impressive monuments of the vitality of the genuine Platonic thought, the most obvious may be the fact that at a very early moment of his career, in 1670, Leibniz himself has vindicated Aristotle, in the preface of his edition of Marius Nizolius, against the radical anti-Peripateticism of the Moderns, while his references to Plato come for the most part later and figure in less well known texts or in documents published a long time after his death.

Yet, about his profound, nay decisive indebtedness to Plato there can be no doubt. This influence efficiently directed his thought not only during his formative years but even more so during a later epoch, in part conveyed through the Augustinian preoccupations of the friends he made during his sojourn in Paris, and in part as a consequence of the increasingly mathematical orientation of his philosophy, which naturally approached him of the Platonic tradition and partially eclipsed the Aristotelian facet of his thought produced by his scholastic education.

It cannot be my purpose to study in this paper the complex problem of Leibniz's Platonism historically or systematically with any detail. All I propose to do is to throw some

* Paper read at the 87th Annual Meeting of the American Philosophical Association, Eastern Division, in Toronto, December 29, 1950.

¹ The best discussion is still that by Foucher de Careil, in the Introduction to his *Nouvelles Lettres et Opuscules Inédits de Leibniz*, Paris, 1857. But a great quantity of relevant texts has been published since then.

light on a particular aspect of it. I may be allowed, however, to point out as a general introduction that Leibniz himself was clearly aware of his Platonism and that his papers and mainly his correspondence abound in the most admiring, almost worshipful references to the Dialogues. He has, in 1676, written Latin abstracts of two of them, the *Phædo* and the *Theætætus*,² and from this epoch on he has repeatedly complained about the lack of good translations which would restore the authentic meaning from the distortions it had suffered through neo-Platonic interpretations. "When I regard Aristotle through his translators", he wrote at an early date, "I take him for a pedant, and when I regard Plato through his translators, I take him for an enthusiast".³ As early as in 1670 he has recommended to keep clear of these interpreters, ancient as well as modern, who have rendered Plato's philosophy bombastic and turgid, and to return to the study of the original Dialogues, principally the *Parmenides* and the *Timæus*,⁴ the latter together with the *Phædo* apparently having been his favorites. The *Timæus* in particular is quoted by him as early as 1664.⁵ While the later Pythagoreans and Platonists — Plotinus, Porphyrius, even Proclus — indulged in superstitions, he remarked about 1676, the work of Plato is full of sound principles, most profound meditations, clear, simple, and almost divine truths. One must wonder, he added, why nobody has put as yet his philosophy into a system, and it is to be regretted that so great and useful a philosophical doctrine has remained buried under inept commentaries.⁶ The form in which Plato has presented his philosophy, Leibniz realized, could not appeal to the spirit of the seventeenth century.⁷ But this unfortunate circumstance made so much more urgent the need for a systematic exposition. The regret concerning the lack of such a work became especially acute during the last two decades of his life. More and more he became inclined to consider his own philosophy as an elaboration on, and a genuine evolution of rudi-

² Publ. by Foucher de Careil, *op. cit.*, pp. 44 sq.

³ *Polit. Schriften*, ed. Acad. of Berlin, I, p. 569.

⁴ *Opp.*, ed. Dutens, IV/1, p. 77.

⁵ *Philos. Schriften*, ed. Acad. of Berlin, I, p. 90.

⁶ Gerhardt, VII, p. 148.

⁷ *Ibid.*, VII, p. 494 sq.

ments contained in the Dialogues.⁸ As his devotion to Plato steadily increased, the admiration for Aristotle receded,⁹ until finally he came to liken the relationship of his own philosophy and John Locke's to that of the doctrines of Plato and Aristotle.¹⁰

Among the thousands of philosophic essays, outlines, projects, and other minor papers left by Leibniz there is one which shows with particular clarity his Platonic inspiration. This essay may even be considered, I think, as an attempt toward the actualization of his desideratum of casting into a systematic form at least one important part of the Platonic doctrine, namely, the central idea of the *Timæus*, the dialogue to which Leibniz referred most frequently and most positively. And the understanding of this much quoted and much misinterpreted little work can only profit when it is regarded in its relation to the *Timæus*. This opuscle, the *De rerum originatione radicali*, dated November 23, 1697 (st.v.), was first published, in 1840, in Erdmann's edition, and reprinted in 1890, by Gerhardt.¹¹ In both editions, the text shows so many misreadings of the manuscript in Hanover that the difficult work has been rendered ununderstandable in part, as evidenced by some translations into English which don't make sense at all. I have been unable to discover evidence for the immediate occasion on which Leibniz wrote it. The language in which it is written — Latin — proves that it was not designed for wider circulation like the *Theodicy*, the *Monadology* or other French texts, but that the author thought of scholars as the prospective readers, though it has not been possible so far to find out whether he proposed at all to publish or to communicate it. That he considered it as rather important appears from the existence of a related Latin manuscript, undated and without a title, published by Gerhardt¹² and after him by Couturat,¹³ which contains in 24

⁸ *Ibid.*, III, pp. 568, 605 sq., 623, 637.

⁹ Letter to Fardella, of 1696, in Grotefend, p. 208.

¹⁰ Gerh., V, p. 41.

¹¹ Gerh., VII, pp. 302-308.

¹² *Ibid.*, VII, pp. 289-291.

¹³ *Opusc. et Fragm.*, pp. 533-535.

brief paragraphs what seems to be an outline of our essay but has not been identified as such by its editors.

The title is somewhat puzzling. Leibniz was too expert a Latinist to use the word *originatio* instead of *origo* without good reason. Now, *originatio* is an unusual word which occurs only once in late classical Latin, in Quintilian's *Institutiones Oratoria*, where it signifies etymology, and Leibniz himself occasionally used it in this sense.¹⁴ In the vernaculars of the seventeenth century it also stands sometimes for etymology. Only Jeremy Taylor, in 1647, employs origination in the sense of coming-into-being, but there is no evidence from which to conclude that Leibniz might have taken this signification from the Cambridge theologian. Is the title meant, perhaps, as a translation of τοῦ κόσμου γένεσις which covers the topic of Timæus' report and occurs more than once in the dialogue (27 A, 48 A)? Marsilius Ficinus rendered the Greek term by *mundi generatio*, but this translation may have been felt by Leibniz to be inadequate because of its close association with the Christian idea of creation *ex nihilo*, and also because of its historical connotation. Where an historical signification is intended, Leibniz always uses the word *origo*.¹⁵ On the other hand, the connotation of etymology may have seemed appropriate to Leibniz because it suggested a derivation, step by step, of successive forms each of which is explained by the preceding which it "copies", *etsi certis mutandi legibus* (even though according to certain laws of change).¹⁶ The existence of the entire series of linguistic forms, however, like that of the causal chains in the world of becoming, requires a different explanation which must be looked for outside the series of change.

Nowhere in the *De rerum originatione* is there any nominatim reference to Plato. One may think that Leibniz tried to support a certain Platonic doctrine by the proper weight of the argument without recourse to the authority of its author. The problem discussed is however clearly that which consti-

¹⁴ *Opp.*, ed. Dutens, V, p. 342.

¹⁵ Cf. e.g. *Origines Guelificæ*, *Origo calculi differentialis*, *Origo Francorum*, *Origines Gentium*, *Maris Origo*, *Origo metallorum*, etc.

¹⁶ *Gerh.*, VII, p. 302.

tutes the most important and timeless part of the *Timæus*, namely the relationship of intelligence and necessity, final and efficient causes, or, as Leibniz also defined the antagonism, architectonic and mathematical, respectively, metaphysical principles. It is significant to note, in this respect, that in neo-Platonic texts the demiurge of the *Timæus* is often referred to as the Architect of the universe. An architect, indeed, neither creates the materials he uses nor legislates the mathematical and physical laws which he has to respect, but only uses them to the best in his building.

Exactly like the *Timæus*, the *De rerum originatione* starts with postulating the existence of an extramundane cause of the world of becoming to avoid the infinite regression. Since every link in the causal chain is necessary only hypothetically, an agent outside the series of causes, a being endowed with absolute, that is, metaphysical necessity is required to account for the reality of the existing world of becoming. This God, however, is not an omnipotent agent any more than the Platonic demiurge. The three independent factors of reality introduced by Plato — the eternal pattern, the receptacle, and the demiurge — are adopted by Leibniz, although divested of their mythological garb and rationalized into pure logico-metaphysical constructs.

Firstly, the pattern or forms. For Leibniz, they have taken on the character of eternal or necessary truths, also called truths of reason, and elsewhere identified with essences, possibles, or real definitions. In a letter to Bishop Huet, of 1679,¹⁷ Leibniz expressly considered the Platonic ideas as identical with his truths of reason, and in a still earlier fragment, of about 1670/71, he contended that what Plato calls an idea is, expressed in words, the same as a definition.¹⁸ Against the Cartesian voluntarism he firmly maintained that these essences or truths of reason are independent of the divine will though

¹⁷ *Ibid.*, III, p. 17.

¹⁸ *Philos. Schr.*, ed. *Academ.*, I, p. 460: "quam Plato Ideam vocabat, quæque verbis expressa idem quod definitio est..." Cf. L. to Seckendorff, Dec. 24, 1683: *reminiscentia seu quod eodem redit notitia æternarum veritatum ex sensibus non pendentium.*"

they are the object of the divine understanding.¹⁹ God, therefore, has not the power to create a world which these truths would fail to fit. Plato's demiurge looking to the eternal pattern as the rational model for the world to be fashioned (29 A) is obviously the source of this intellectualistic doctrine.

There seems to be, however, at least at first sight, an important difference between Plato's pattern and Leibniz's eternal essences. The latter, indeed, are not merely unchanging forms but dynamic agents. Every essence or possible reality, according to Leibniz, tends toward existence, and the force of this conation is proportional to the quantity of reality or perfection involved in the essence.²⁰ The actual world emerging from this emulation of possibles is, then, necessarily the one among all possible worlds which contains the maximum of essence, reality, or perfection, just as — Leibniz frequently used this or a similar analogy — the center of gravity of a chain suspended on both ends will perform a maximum descent. If Plato's forms are interpreted as static entities, an interpretation most frequently suggested by the texts, Leibniz's dynamic conception cannot be considered, of course, as a genuine interpretation of the historic Plato. There are, however, passages in the dialogues which allow of a different exegesis, and since I am not contending that Leibniz's intention has been historical, it can be maintained that even in regard to this point he was inspired by his Platonic studies. The *dynameis* or powers by which, in the *Sophist* (247 D-E), real being is constituted are defined by the capacity to act and to be acted upon, and some modern commentators have identified, rightly or wrongly, these *dynameis* with the nature of things, just as Leibniz did. In this respect, another Platonic line of thought has to be taken into account. The dialectical argument concerning the combining or blending of forms, or their mutual exclusion (*Sophist*, 252 E) finds an exact parallel in Leibniz's doctrine concerning compossible and incompatible essences. Since, according to this principle, it is impossible for all the essences to be actualized together, a selection has to

¹⁹ Cf. Gerh., VI, p. 115.

²⁰ *Ibid.*, VII, p. 303.

intervene which is brought about, not by a will, good or bad, but by another rational principle, as will appear soon.

The second factor of reality, the Platonic *Receptacle*, is identified by Leibniz with space and time which together he terms characteristically the *receptivitas vel capacitas mundi* and which he considers as the order of possible existence.²¹ I need not elaborate on the opposition to Plato insofar as time is concerned, which may be accounted for historically by the rise of mathematical dynamics, nor on the detail of Leibniz's concept of space, the less so since in our text he passes rapidly over this point. May it suffice to remark that Leibniz like Plato realized that the eternal essences alone cannot account for the reality of the phenomenal world of becoming. For Leibniz, however, space and time belong to the intelligible realm rather than to that apprehended by "bastard reasoning" (52 B). Historically this divergence, too, may perhaps be explained by the progress of geometry which had gradually eliminated the "bastard" element of imagination, and mainly by Leibniz's invention of a rational *analysis situs*.

The third factor is God fulfilling the function of the Platonic demiurge. But once this demiurge is entirely demythologized and the other factors are rationalized, what function remains to him? The essences or possibles vie among themselves for existence — logically, of course, not in a process in time — and this competition leads necessarily toward the actualization of the maximum of reality or perfection. God being himself conceived as perfect — or, in the Platonic sense, good — cannot but ratify the outcome of this rational calculus of maxima, by adding to that possible world or combination of possibles whose perfection outweighs that of the others the entirely unintelligible quality of actuality. He is like an ideal chessplayer for whom the best move would have been calculated infallibly and who could not but perform it on the chessboard. The rules of chess may stand, in this metaphor, for the eternal truths which are independent of the will of the chessplayer: he can only make the best use of them. It is true that, differently from the original but conformably to the Christian-

²¹ *Ibid.*

ized Plato, the reality of the essences and the validity of the truths of reason is guaranteed, according to Leibniz, by their inherence in the divine understanding of which, yet, they are the *object* and by no means the *product*. This argument does not leave any more real function to the demiurge or, for that matter, to the Leibnizian God, than to stand as an hypostasis of the powers inherent in the essences.

The interrelationship of the three factors is the key to the interrelationship of mechanism and teleology, or necessity and reason. To understand this it has to be remembered that according to Leibniz all the truths of mathematics and metaphysics are eternal and necessary, that is, their contrary involves contradiction. The problem then is to show how, from these, the contingent truths of fact can be derived, whose contrary does not involve contradiction. In Platonic terms, the timeless genesis has to be discovered which leads from the region of changeless forms to the region of endless becoming. In answer to this problem Leibniz has adopted, with a remarkable transformation, the Platonic doctrine of *Noûs persuading Necessity* to lead towards the best the greater or greatest part of the things coming into being. It can hardly be doubted that Leibniz's much ridiculed but little understood optimism drew its inspiration from this famous passage of the *Timæus* (48 A). His conception of necessity and persuasion is, however, a very free adaptation — one might say, a radical rationalization — of Plato's personifying account. At least, Leibniz's doctrine differs greatly, on this point, from that read into Plato by his most competent commentators, even though it may not be so incongruous with the spirit of the Dialogues.

In a remarkable study, Glenn R. Morrow has recently explained that the "works of necessity" are the dependable and regular causal effects of the four primary bodies, so that the necessity which has to be persuaded by intelligence would reside in these materials preexisting in the Receptacle.²² Though this interpretation introduces a completely irrational element, it can doubtless be maintained to represent the genuine thought of the historic Plato. Nevertheless, it raises very strong systematic scruples, which Leibniz's rationalistic transformation

²² *Philosophical Review*, Vol. LIX, No. 2, April 1950.

attempted to eliminate. Firstly, if the diversity of the four elements can be reduced to differences of geometrical configuration, as Plato has advanced, it becomes difficult to understand how an irrational necessity can continue to reside in them, a necessity which has to be persuaded by intelligence. Secondly, Plato admits the existence of ideas — which, as ideas, must be intelligible — of earth, water, air, and fire, so that again there does not seem to be any place for an irrational necessity inherent in them. Yet there is a different kind of necessity which Plato recognizes elsewhere, a kind which may be called logical or dialectical in contradistinction to the physical necessity with which the *Timæus* seems to be concerned. In the *Republic*, for instance, he distinguishes expressly between "geometrical" necessity and another sort "which lovers know, and which is far more convincing and constraining to the mass of mankind" (458 E, Jowett translation). Moreover, there are certainly eternal and necessary principles by which the *κοινωνία* of forms discussed in the *Sophist* is articulated (cf. 254 E, 255 D).

It is this kind of necessity coinciding with his own conception of eternal and necessary essences which became for Leibniz the fulcrum of the discussion. Those necessary truths — mathematics and metaphysics — would fit any possible world. Thus our problem takes on the form: how can we, starting from the apriori knowledge of mathematics and metaphysics which, we are certain, fit our world, attain knowledge of the positive laws of nature which rule the region of becoming exclusively but which are contingent since their contraries would not imply logical contradiction? This, it will be readily realized, is the eternal problem which has still worried Kant during the last years of his life when he heroically wrestled with the task of discovering a *Transition from the Metaphysical Principles of Natural Science to Physics*. Does it really help to demote it to the rank of a pseudo-problem?

The solution proposed by Leibniz used but modified Plato's more or less mythological doctrine of persuasion. In the series of change, Leibniz maintained, the reason for existence is the prevailing of inclinations, a sort of reason which does not necessitate (with absolute or metaphysical necessity, so that

the contrary would imply contradiction) but only inclines or disposes.²³ Reasons which do not necessitate but only incline or dispose: is this not obviously but a merely more explicit expression of what Plato called persuasion? Is not Rhetoric the technique of persuasion and does it not consist in the very art of appealing to inclinations and dispositions? (*Phædrus*, 270 ff.) But, all personifications set aside, what is the persuading agent, and whose inclinations and dispositions are won over by this sort of reasons?

In his answer, Leibniz refers to the principle of the economy of nature, the determining principle according to which a maximum effect is attained with a minimum expenditure.²⁴ This Aristotelian axiom which later was developed by Leibniz into at least an anticipation of the principle of least action was conceived generally in the seventeenth century as a rational principle and by Leibniz himself as a principle of scientific rationality. It follows from this economy that the transition from possibility (which is absolutely dominated by logico-metaphysical necessity) to actuality (which is logico-metaphysically contingent) must produce a maximum of reality or perfection. Thus, even though the actual world is not metaphysically necessary in the sense that its non-existence or otherness would imply contradiction or logical absurdity, it is morally necessary in the sense that its non-existence or otherness would imply imperfection, moral absurdity, or opposition to the principle of economy.

No appeal to the goodness of God is necessary any longer, for the rational principle of economy is just as inviolable for him as is the principle of sufficient reason itself. The persuasion involved can only be, then, the principle of selection — itself rational — singling out from among the essences competing for actuality those by which "the most", that is, the maximum of reality, will be led to "the best", that is, the maximum of perfection. The traditional scholastic equation of reality and perfection has entirely replaced the recourse to God's infinite goodness. Leibniz has answered himself the

²³ Gerh., VII, p. 302. Cf. *ibid.*, III, p. 550: "Ratio vel causa, quâ inclinatur agens, etsi non necessitetur."

²⁴ *Ibid.*, p. 303.

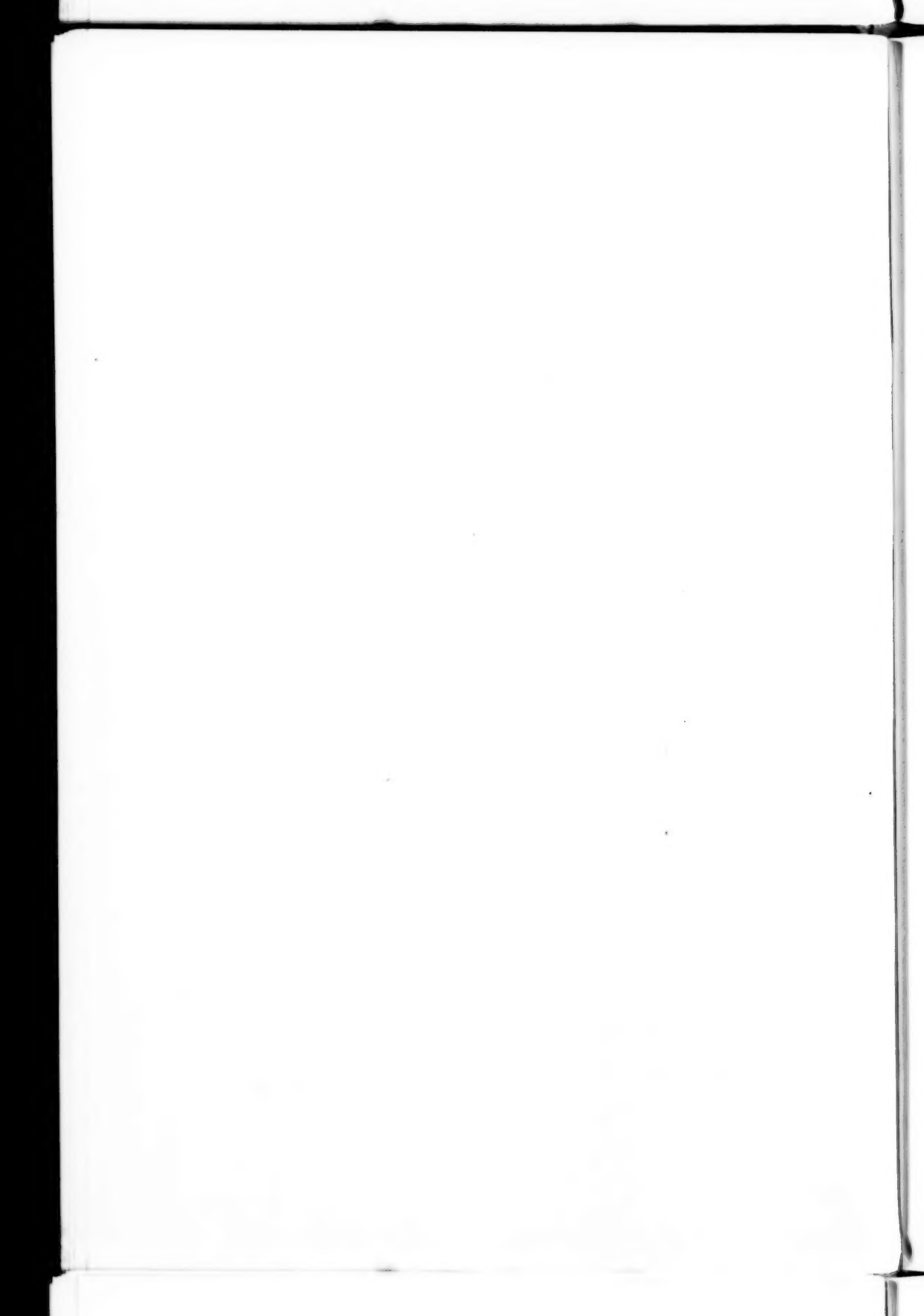
obvious objection that this argument implies a confusion of metaphysical perfection or degree of reality, and moral perfection. Again inspired by Plato, he has pointed out that in one sector of reality at least the two sorts of perfection necessarily coincide, since, the metaphysical perfection of the human soul, its complete reality as a soul,²⁵ is moral perfection: *Moralis perfectio ipsis mentibus physica est. Physica*, of course, must not be translated by *physical*, as some translators have done. It has, in this passage, the archaic meaning of natural or essential. What Leibniz wanted to express is exactly what Plato so frequently insisted upon, namely that the soul attains perfection only in proportion as it partakes of the realm of eternal forms and is thus the highest of those things which are becoming in time. The very nature of mind is reason, a thought the development of which led in a straight line to the doctrine of monads which Leibniz saw foreshadowed in Plato.

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²⁵ *Ibid.*, p. 306.





THE TRANSCENDENTAL IDEALITY AND EMPIRICAL REALITY OF KANT'S SPACE AND TIME

I

THE PROBLEM OF SCHEMATISM

Kant's statement of what might be termed the central problem of the *Critique of Pure Reason* is put in his famous query: how are synthetic a priori judgments possible? This question can be interpreted in various ways. For example, it can mean: 1) are synthetic a priori judgments possible? or 2) how can we explain the possibility of synthetic a priori judgments? In the former case the very possibility of synthetic a priori judgments is in question, whereas in the latter case it is only an explanation of such judgments that is wanting. Kant himself interprets the question in both ways, sometimes seeking to show that there are synthetic a priori judgments and at other times only to explain them, e.g., in the case of geometry. He distinguishes between the two modes of exposition and proof as synthetic and analytic. The argument of the *Prolegomena* is, in this sense, primarily analytic, whereas the argument of the *Critique* is both synthetic and analytic.¹

There is a second way in which the question is capable of a twofold interpretation. One might begin with a priori concepts which have no empirical reference and ask how they can apply to objects. Or, one might deny the dichotomy between the a priori and experience and inquire how synthetic a priori judgments about experience can be accounted for. Initially Kant regarded the problem of schematism in the former way as that of bringing together two divorced realms. From this standpoint it is assumed: a) that a priori concepts are generated by mind independently of experience, and b) that

¹ *Prolegomena*, Sec. 4, Bernard and Mahaffy, Tr.

objects are given in intuition² However, Kant came to see that if the problem is stated in this way it is insoluble. Only a pre-established harmony would guarantee that a priori concepts apply to objects.³ He attempted to break down this dualism between intuition and thought, between objects and concepts by showing that the knowledge of objects requires both intuition and thought. Unfortunately the original statement of the problem recurs alongside of the revised formulation at many places in the *Critique*. A close study of the development of Kant's thought makes it sufficiently clear that it is the latter statement of the problem which alone represents his mature insight and is consonant with his transcendental method of proof.⁴

Kant took great pride in the fact that he had developed a new method of discovery and proof. It is important to emphasize that it is as much a method of discovery as a method of proof, and that the two aspects are interdependent. The main body of the *Critique*, which contains the core of his argument, is significantly entitled "Transcendental Logic." In order to solve the problem of a priori knowledge Kant found it necessary to develop a new logic, a logic of "the real employment of the understanding." Transcendental logic is distinguished from general or formal logic in that it is not abstract but depends for its meaning and validity upon experience.⁵ It is restricted to a determinate context, in the case of the first *Critique* to appearances in space and time.

Kant's efforts to undermine dogmatic metaphysics and limit the sovereignty of reason have made it clear enough that

² *Critique of Pure Reason*, N. K. Smith, Tr., A90-B122: "Objects may, therefore, appear to us without their being under the necessity of being related to the functions of understanding." cf. A94-B127: "The transcendental deduction of all a priori concepts has thus a principle according to which the whole inquiry must be directed, namely that they must be recognized as a priori conditions of the possibility of experience, *whether of the intuition which is to be met with in it, or of the thought.*" (My italics)

³ A95-B168.

⁴ For a detailed analysis of the text of the Transcendental Deduction, see H. Vaihinger, *Die Transcendentale Deduktion der Kategorien*, 1902.

⁵ B80-A56.

the validity of the categories is stringently limited. I am not sure that it is equally apparent that the validity of his categories requires this limitation. Kant's critique of metaphysics is at the same time a defense of his phenomenalism. It is only because the categories are restricted to space and time that they can be shown to be necessary. They are discovered by an analysis of experience which reveals that they are the necessary a priori conditions of our knowledge of objects in space and time. Apart from this method of discovery a transcendental proof of them would be impossible.⁶

The Metaphysical Deduction. The metaphysical deduction of the categories, in which Kant presumes to begin with formal rules of judging which are unrestricted in scope, does not represent Kant's transcendental procedure in discovering the categories nor his proof of their necessity. The metaphysical deduction has been generally regarded by Kant's interpreters as a failure — which indeed it is! But the important point is not that Kant failed to deduce the categories from the forms of judging, but that the method of proof of the metaphysical deduction stands the *Critique* on its head. From the standpoint of the metaphysical deduction Kant is faced with the insuperable task of relating timeless categories to the sensible manifold.⁷ Not only are the pure categories unrelated to space and time but they are generated by reason irrespective of any empirical context. Kant considered the metaphysical deduction to be very important and never gave it up, in spite of the difficulties it presented. He believed, and perhaps rightly, that the relation of cause and effect is grounded in the logical relation of ground and consequent. The fact remains, however, that in the second analogy causality is not justified as a logical relation of ground and consequent.

There would be no serious loss in the *Critique* if the entire metaphysical deduction were to be eliminated. Kant undoubtedly believed that by grounding his categories in general logic

⁶ A96: "That a concept, although itself neither contained in the concept of possible experience nor consisting of elements of a possible experience, should be produced completely a priori and should relate to an object, is altogether contradictory and false."

⁷ Cf. A77, B179-A140.

he could guarantee them a certain completeness and finality which is otherwise lacking. But he failed to recognize that the proof offered in the case of the metaphysical deduction is wholly dogmatic and represents an illegitimate justifying of transcendental principles.⁸

The concept of Experience. The rationalistic character of Kant's metaphysical deduction of the categories, on which the critical philosophy appears to depend for its ultimate justification, obscures the fact that Kant is fundamentally an empiricist. It has often been suggested that Kant sought to reconcile rationalism and empiricism by forcing a marriage between them. His philosophy is described more accurately, in my judgment, as a genuine empiricism which finds experience to be far richer than Hume had thought it to be. Kant outflanks Hume by showing that experience includes necessity, that without the a priori it is impossible. It is the concept of "possible experience" which underlies and serves as the principle of justification for all transcendental principles. The categories of understanding are not derived from general logic but from experience. Although they may have a kind of necessity which is expressible formally in general logic, the transcendental necessity of a priori principles in the *Critique* is a material necessity which is validated only by appeal to experience.

Kant employs the term "experience" in two distinct ways and it is important not to confuse these meanings. He uses the term "experience" to designate 1) the immediately given content of sensation, and 2) the phenomenal world. The latter includes both form and content, both sensible and a priori elements. Kant is not always careful to distinguish between these two meanings and his exposition suffers considerably in clarity from this ambiguity.⁹ When he refers to the "possibility of

⁸ The initial statement of the problem of the Transcendental Deduction and Schematism is based on the Metaphysical Deduction and, hence, is quite misleading. Cf. B118-A85, B177-A138.

⁹ A113: "All attempts to derive these pure concepts of understanding from experience, and so to ascribe to them a merely empirical origin, are entirely vain and useless." Cf. *Prol.*, Sec. 22: "Experience consists in the synthetical connection of phenomena (perceptions) in consciousness, so far as this connection is necessary." Cf. also Sec. 30,36; A95.

experience" or "possible experience" he invariably employs the term in the second of the two senses. The a priori is an element in Experience. It is derived from an analysis of Experience and justified by appeal to Experience.¹⁰ Kant's statements in the Aesthetic and Analytic that space, time, and the categories cannot be derived from experience are quite misleading. He means to insist that they are not given in sensation, that they are not arrived at inductively. In making such assertions he is using the term "experience" in the first sense. But Kant means to argue in the *Critique* that there is no pure given, that "experience" in this sense is a myth.¹¹

Cognition, for Kant, includes two moments, intuition and thought. From the start he ruled out the possibility of intellectual intuition. Intuition is restricted to sensation and thought to judgment. The world as we know it is not an amorphous and inchoate sensed continuum. We might possibly have some sort of awareness of such an æsthetic continuum. In fact Kant often finds it necessary to refer to such an unarticulated experience as one might refer to frictionless motion.¹² But we do not and could not have knowledge of an undifferentiated continuum. We may talk about it, and Kant does just that in the Aesthetic, but we must keep clearly in mind that it is an abstraction from Experience and not Experience itself. Our thought must have content and our intuitions form. For the purposes of analysis we may isolate form from content, but we must not be misled into regarding them as divorced realms.

If I have stated Kant's position correctly, the solution to the problem of schematism depends upon the demonstration

¹⁰ A93-B126: "The objective validity of the categories as a priori concepts rests, therefore, on the fact that, so far as the form of thought is concerned, through them alone does experience become possible." Cf. A96: "If, therefore, we seek to discover how pure concepts of understanding are possible, we must inquire what are the a priori conditions upon which the possibility of experience rests, and which remain as its underlying ground when everything empirical is abstracted from appearances." (My italics)

¹¹ A118, note, B138.

¹² A112: "These perceptions would not then belong to any experience, consequently would be without an object, merely a blind play of representations, less even than a dream."

that: a) intuition without concepts is blind and concepts without intuition are empty, and, b) intuition is not blind nor are concepts empty. He has the difficult task of showing not only that some sort of categories are required for Experience, which is all that is proved in the Transcendental Deduction proper, but that the particular categories he advances are required in order to account for intuition. A good many philosophers today are Kantians in that they accept the argument of the Deduction. But they refuse to accept the thesis that there are genuine categories, in the sense of concepts necessary for the articulation of the given. The supporters of the analytic theory of the a priori begin with the divorce between intuition and thought which Kant was forced to deny in order to justify a priori knowledge. Hence, for them a deduction or schematism for a priori concepts is impossible. They must fall back on a pragmatic test of the applicability of the a priori to the given. In making the a priori timeless and purely formal, they have denied themselves any possibility of establishing the necessity of a priori principles. The analytic necessity of a priori principles, depending upon non-contradiction, convention, or decision, does not pertain to experience but only to the conceptual order. They have equated experience with the data of sensation and, hence, find it too impoverished to support a priori concepts. The necessity is all on the side of mind and the constructs of mind. The given is strictly contingent, as is the relation between the a priori and the given. In general no satisfactory explanation is offered why the a priori applies to the given at all.

In the Aristotelian or Kantian sense of category, — Kant and Aristotle are in agreement on this — there can be no alternative modes of interpretation.¹³ If there are alternative sets of a priori concepts which may be taken as ultimate for the articulation of experience, it is legitimate to inquire whether there may not be certain categories which are presupposed by each of these systems of interpretation. If we grant that there are different a priori systems of classification which satisfy the conditions of intelligibility, or understanding in Kant's sense of it, there must be unexpressed and implicit a priori conditions

¹³ A81-B107 ff., *Prol.*, Sec. 39.

of intelligibility which are categorial. Perhaps Kant's categories are not ultimate, any or all of them, in which case they are not categories at all. But to establish this point is not sufficient to demonstrate there are no categories.

II

SPACE AND TIME AS MEDIATING BETWEEN INTUITION AND THOUGHT

The central problem of the *Critique* is, as we have seen, to relate thought and intuition. Kant had denied the possibility of a justification of a priori concepts analytically. Any advance in our knowledge requires synthetic judgments and, hence, some "third thing" to bind together the terms of the judgment.¹⁴ It is a cardinal doctrine with Kant that no synthetic a priori judgment can be validated by thought alone. This means that no synthetic a priori principles are self-evident to reason. Even in the case of geometry and arithmetic an intuition is required to validate the judgment.¹⁵ Some contemporary rationalist philosophers defend the view that synthetic a priori propositions are self-evident, that the necessity which binds together the terms of the judgment can be grasped by reason alone. This is certainly an un-Kantian defense of the synthetic a priori and one which, I am sure, Kant would have denounced as dogmatic and rationalistic.¹⁶ If we must limit a priori truths to those which can be grasped by reason alone, Kant would, I think, side with the exponents of the analytic

¹⁴ A8: "Thus it is evident... that in synthetic judgments I must have besides the concept of the subject something else (X), upon which the understanding may rely, if it is to know that a predicate, not contained in this concept, nevertheless belongs to it." Cf. B178-A139. Synthetic a priori judgments are, for Kant, both synthetic and analytic. As involving a relation between concepts they are synthetic, but as grounded in a "third thing (X)" which binds together the terms of the judgment, they are analytic not of concepts but of the non-conceptual ground.

¹⁵ B41.

¹⁶ B298-A233: "For, if, in dealing with synthetic propositions, we are to recognize them as possessing unconditioned validity, independently of deduction, on evidence [merely] of their own claims, then no matter how evident they may be, all critique of understanding is given up."

theory. The only formal principle for the validation of a priori statements is the principle of non-contradiction.¹⁷ If Kant could have been persuaded that synthetic a priori statements are self-evident he could have saved himself the trouble of providing a deduction for his categories. The positivists are much closer in spirit to Kant than are the neo-rationalists on this point, though neither of them is very close to Kant.

The "third thing" which Kant offers to provide the mediation between thought and intuition is space and time. Kant's entire argument in the *Critique* rests upon his analysis of space and time.¹⁸ The necessity of the categories and the principles of understanding cannot be validated by reason alone. This would involve a dogmatic procedure and leave us with formal principles which are still unrelated to intuition. In the metaphysical deduction Kant attempted such a formal justification of his categories, but he was not content to rest his argument on this proof. It is curious that Kant should have insisted that the necessity of the a priori is mind-contributed. This clearly suggests a rationalistic theory of the a priori and has been widely interpreted as such by Kant's readers. If we put aside the metaphysical deduction there is, I think, little justification for this interpretation. As I will attempt to point out, it is of the essence of the transcendental that it not be mind-contributed, unless we take "mind" in some Pickwickian sense. Since the necessity of the a priori cannot be justified dogmatically, Kant must fall back on intuition as the ground for necessity. It is the intuition of space and time which serves ultimately as the ground for the necessity of the synthetic a priori. Kant must show that space and time, though sensible and empirically real, are a priori. This proof of the ideality of space and time is the foundation stone of the architectonic of the *Critique*.

The necessity of space and time. Kant asserts that space

¹⁷ Cf. A279-B335, A7-B11, A151-B191.

¹⁸ A145-B185: "The schemata are thus nothing but a priori determinations of time in accordance with rules." Cf. A99, A216-B263. In the Deduction time is stressed, but in the Analytic of Principles the fundamental importance of space and the interdependence of space and time is made explicit.

and time are empirically real and transcendently ideal.¹⁹ I think that there is no doctrine in his philosophy which is more difficult to understand. Kant's view of the ideality of space and time has frequently been interpreted psychologically. One finds in many of the textbooks and a few of the commentaries the explanation that Kant regarded space and time as "colored glasses" which serve to impose a peculiar form upon the sensible manifold. Although some of Kant's remarks suggest such a view, this does not represent his theory of transcendental ideality. One thing is clear enough, namely that in so far as Kant's theory of the ideality of space and time is grounded in the psychological or physiological apparatus of the empirical subject, it is of little consequence for his transcendental philosophy. It is inconsequential because it cannot establish the transcendental necessity of space and time which is required for Kant's argument. What kind of necessity could be provided on a psychological interpretation? I suppose at best it would be the sort of necessity which can be assigned to a psychological law. But since the latter is contingent it is no more transcendental than the law of universal gravitation. Moreover, it could only be established inductively. That is, I could examine my experience and determine that it is always spatial and temporal. I could inquire of others whether this is the case for them and, perhaps, conclude that it seems to hold for all human beings. But this procedure would not establish that it must be true for my own experience at all times or for all other human beings. It would at best be highly probable that sensible intuition would, for any given mortal, be spatial and temporal.

Kant insists in the *Aesthetic* that the proof of the a priority and necessity of space and time is not inductive. He recognized full well that an inductive argument cannot provide necessity.²⁰ Once space and time have been proved to be transcendently necessary this might be explained in part by appeal to psychological and physiological factors. But the proof of necessity and the explanation of the necessity must not be confused. Kant must first show that space and time are a

¹⁹ A44-B28.

²⁰ A24-B39.

priori forms of intuition, that the categories are necessary rules of synthesis, and then account for this necessity. He does this by appeal to mind. But one can accept his arguments for a priority without accepting his explanation of the a priori. Kant did not adequately distinguish the two elements in his argument since he considered that his justification of the a priori rested on his idealism. It is very difficult to see precisely what form of idealism is supported by the *Critique*. It seems to me that a realistic explanation of the a priori is not only compatible with Kant's transcendental method of proof but actually is more consistent with it.²¹

Space and Time as Forms of intuition. Kant argues in the Aesthetic that space and time are a priori forms of intuition. This implies that all appearances must be in space and time and that whatever is true of space and time must be true of appearances. In the Transcendental Deduction he seeks to show that the categories of understanding are the necessary modes of time determination. Thus the Deduction rests upon the Aesthetic. The time determinations established in the Deduction must hold for all appearances in time.²²

Actually the Aesthetic is equally dependent on the Deduction since neither can establish its conclusions apart from the other.²³ But for the moment we are primarily concerned with the argument of the Aesthetic proper. It is evident that in the Aesthetic Kant must demonstrate two propositions: 1) that all appearances are in space and time, and 2) that the characteristics of space and time can be known a priori. These two points require independent proofs since to show that all appearances are in space and time does not establish that we have a priori knowledge of space and time. With respect to

²¹ Alexander, for example, accepts many of Kant's arguments for the a priority of space and time, but he insists that they are metaphysically real. *Space, Time, and Deity*, I, pp. 35 ff. Cf. Ewing, *Idealism*, pp. 64 ff.

²² B161, B256-A111, A177.

²³ B161 note: "In the Aesthetic I have treated this unity as belonging merely to sensibility, simply in order to emphasize that it precedes any concept, although, as a matter of fact, it presupposes a synthesis which does not belong to the senses but through which all concepts of space and time first become possible."

the first point Kant must show that appearances not only are in space and time but that they *must be* in space and time. Only if this is demonstrated can it be maintained that space and time are a priori forms of intuition and that they are transcendentally necessary.

III

THE NECESSITY OF SPACE AND TIME AS FORMS OF INTUITION

The word *intuition* as Kant uses it in the Aesthetic is highly ambiguous. It can refer to a) the intuiting — or b) to the intuited content. The references to space and time as forms of intuiting, if it be taken in this sense, suggest a psychological or physiological necessity. We must have a capacity for intuiting space and time, or, more precisely, for intuiting a manifold in space and time. Hence, they may be described as forms of sensibility. But this is not a proof of a priority or ideality. We must have a subjective capacity for intuiting colors and sounds. Yet they are neither a priori nor ideal. In fact, our sensations are almost wholly dependent, on Kant's view, upon our being affected by objects.²⁴ In view of the fact that Kant always insisted that we know the self only as a phenomenal object under the form of time, it is evident that time, at least, cannot be explained by reference to the empirical consciousness. Kant's assertions in the Aesthetic that space and time are forms of sensibility must be interpreted with extreme caution. Sensibility certainly cannot be construed to refer to the individual or empirical knower. As forms of intuition, space and time have transcendental status. They cannot at once explain and be explained by our empirical consciousness. Sensibility and understanding are not psychological faculties and nothing but confusion can result from interpreting them as such.²⁵

The emphasis in the Aesthetic is not upon the intuiting but the intuited. Kant is seeking to show that space and time are necessary forms of the sensible manifold. By a process of abstraction he separates form from content and establishes the priority of space and time to the variable and determinate

²⁴ B45-A30, B208-A167.

²⁵ Cf. A106 ff., *Prol.* Sec. 19.

content of sensation.²⁶ Kant insists that his argument is not inductive, yet, I must confess, it bears certain marks of an inductive argument. For one thing he maintains that other beings may have modes of intuition other than space and time.²⁷ If the necessity of space and time is restricted to human beings it can easily be asked why these are necessary to human beings. Is it possible that other creatures or even some human beings might depend upon sensible intuition for the material of knowledge and yet not order this manifold in space and time?

If this is possible it would appear that the connection between space-time and the determinate manifold is purely accidental and anything but necessary. It is doubtful whether even God's knowledge of the phenomenal world can be completely exempt from the limitations of space and time. God might have a non-discursive knowledge of the manifold in space and time, that is he might not arrive at it piecemeal as do mortals. However, it is difficult to see how God could know all that is without being aware of objects in space and time. Kant regarded the distinction between actuality, possibility and necessity to be subjective and accidental. On this view of time God might have fore-knowledge of the future and present knowledge of the past in a way that transcends anything of which human beings are capable. But if there is genuine alteration and change, even of a mechanical sort, there would be one sense in which God would have to wait upon time for his knowledge of actual events. An event which has taken place is different from the same event which must take place but which has not actually transpired. To deny that any of God's knowledge is subject to the form of time is tantamount to the denial that there is any real change or alteration. Hence it is not at all clear that appeal to divine knowledge offers a sufficient ground for the belief that knowledge of the physical world might not be subject to time. Apart from speculation about God's knowledge, we haven't the slightest idea what other modes of intuition might be possible.²⁸

²⁶ B36-A22.

²⁷ A27, B90.

²⁸ B139.

Kant's references to other possible modes of intuition suggest a contingent relationship between the forms of intuition and the sensible manifold which cannot be allowed on his theory. Since the connection between space and time and the sensed manifold must be necessary and, further, since it cannot be merely psychologically necessary, Kant must offer other grounds for the relation. He must show that space and time are necessarily bound to the manifold of intuition as form to content. It must be a two-way necessity. That is, the content must require precisely these forms in the same way that the forms require this determinate content. As a matter of fact this is actually the case, as Kant attempts to prove, but form and content require each other in somewhat different ways. Space and time are nothing in themselves. Apart from the matter of sensation of which they are forms space and time would be nothing.²⁹ The variable content of sensation is just as necessary for the possibility of experience as are space and time. The manifold is prior to space and time analogous to the way in which space and time are prior to the sensed manifold. Without content there could be no forms and, further, without a particular kind of content there could not be the specific forms, space and time. This point is easily overlooked, and Kant, for obvious reasons, chooses to concentrate upon the a priority of space and time. If we did not have the kind of visual and tactile sensation we do have it is doubtful that we would have an intuition of space. Yet the awareness of space does not require the perception of any specific sensations of color or touch. If we never perceived the color red, for example, it is doubtful that our intuition of space would suffer in the least. A man who is color-blind is not deprived of an intuition of space. Yet a person who was blind and incapable of tactile and kinesthetic sensations might very well be unable to arrive at an awareness of space. In any case his consciousness of space would most likely be quite different from that of a normal observer.

The necessity of space and time. One of Kant's proofs of the a priority of space and time rests upon the fact that space

²⁹ A156-B195.

and time are universal and invariant in a way that specific sensed objects are not.³⁰ In examining our perceptual experience we find that all color perceptions involve the perception of space. We may vary the colors without changing the space. Similarly with change and alteration. The awareness of time does not require the perception of any specific change or alteration. We may vary the change at will, but the time remains the same. In short, the intuition of space does not require the intuition of redness, but the intuition of redness requires the intuition of space. Although the intuition of space requires sensations it does not require any particular sensations. Moreover, unlike the varying data of sensation, which are rich beyond description, space remains constant throughout the perceptual field. On Kant's analysis this entitles us to assert the a priority of space and time with respect to the sensed manifold.

So far Kant has established the universality but not the necessity of space and time. Kant held that transcendental principles are both necessary and universal. However he regarded either necessity or universality as an infallible criterion of a priori knowledge. Unless necessity is taken as itself a test of universality this does not follow. Perhaps one must *know* that something is necessary in order to *know* that it is universal, but a thing may be universal without being necessary.³¹ In view of the fact that a principle may be universal without being necessary, certainly without being demonstrated to be necessary, a further proof is required in the case of space and time. Does Kant offer this second proof in the Aesthetic and, if so, what form does this proof assume? He maintains that we could not recognize a change as a change without being aware of time. But in view of the fact that we could not be aware of time apart from change and alteration this is not a very convincing proof. Does Kant mean to assert that we recognize immediately that there is a necessary connection between color and extendedness, between alteration

³⁰ A24-B39, A31-B47.

³¹ B4: "Necessity and universality are thus sure criteria of a priori knowledge, and are inseparable from each other. ... It is advisable to use the two criteria separately, each by itself being infallible."

and time? Certainly he cannot maintain that any such necessary connection between color and space can be given in sensible intuition. Kant agrees with Hume that necessity as such can never be given in sensation alone. A judgment is clearly involved in the recognition of a necessary connection between space and color, alteration and time. To state that all colors are extended is to state a fact. However this does not suffice to show that colors must be extended or that our perception of color logically requires the perception of extend-
edness. Kant could say, of course, that this is a synthetic a priori proposition, that we have direct rational insight into the necessity which binds color and extension. But in any case it is a judgment and not an intuition. If I am correct in my interpretation of Kant's position, he would be unwilling to accept this validation of space, since it would commit him to the view that synthetic a priori judgments are self-evident.³² So far as the Aesthetic is concerned Kant takes it as a fact that all sensations involve space and/or time. It remains to be established in the Analytic that space and time are necessary forms of intuition. The latter point can be made only after it has been demonstrated that all empirical judgments involve a priori determinations of space and time.

Conclusions of the Aesthetic. Kant's arguments in the Aesthetic do not establish that space and time are necessary or even that they are universal for sensible intuition. He offers several examples of sense perception in which the awareness of space and time is involved. On the basis of these examples he generalizes and arrives at the conclusion that all perceptions are in space and/or time. The point would seem to be obvious enough that Kant was justified in not laboring it. Nonetheless the fact that he did not rest upon this as a proof of the universality or necessity of space and time is indicated by the fact that he rules out any possible intuitions which are

³² A151-B191, B196-A157: "Experience depends, therefore, upon a priori principles of its form, that is, upon universal rules in the synthesis of appearances." "Apart from this relation [to experience] synthetic a priori principles are completely impossible. For they have then no third thing, that is no object, in which the synthetic unity can exhibit the objective reality of its concepts." Cf. B203-A163.

not spatio-temporal. The latter contention is far stronger and in no way based upon inductive argument. Kant's fundamental premise and the last bulwark of his argument is that only intuitions in space and time can serve as material for empirical judgments. On the basis of this contention Kant is entitled to assert that even if there are sensations which do not presuppose the awareness of space and time, his arguments for the a priority of space and time remain untouched. Since the kind of intuition with which Kant is concerned in the *Aesthetic* is that which offers material for demonstrable empirical knowledge, he can legitimately rule out any intuitions which do not conform to this criterion. As he attempts to show in the *Analytic*, since all objective knowledge involves the determination of a manifold in space and time, space and time are universal and necessary modes of intuition.³³ Unless this qualification is made it must be admitted that Kant fails to show in the *Critique* that space and time are necessary or even universal modes of human intuition.

But apart from these limitations of the *Aesthetic*, limitations which are later made good, Kant does establish two points with respect to space and time which are of considerable importance. He shows that they are given intuitively as forms, that they are individual, continuous, homogeneous, and infinite. Although these characteristics of space and time are held to be intuitively given, the same properties are later demonstrated as necessary conditions of empirical knowledge. Hence Kant does not rest his argument on the revelations of intuition as expounded in the *Aesthetic*. As soon as we begin to talk about space and time we are forced to move to the conceptual level. In fact a cognition of space and time, as of objects in space and time, is impossible through intuition alone. Intuitions by themselves are blind and sensation is mute. But this does not mean that certain material is not directly and immediately presented to us in intuition which governs our attempts to provide a conceptual interpretation of our experience. In the *Aesthetic* Kant is attempting to separate out the intuited element of experience and to analyze those character-

³³ B160, A146-B186.

istics of the given which are presentationally immediate. There is no inconsistency in method nor contradiction in conclusions between the Aesthetic and the Analytic. It is perfectly reasonable for Kant to discuss and analyze space and time as intuitively given in the Aesthetic and later, in the Analytic, to make explicit the role of understanding and synthetic processes in the cognition of space and time.³⁴ In the final analysis we must fall back upon intuition to validate our judgments about space and time. If Kant's assertions as to our intuitions of space and time are false, his justification of the categories in the Analytic need not be accepted. The Analytic provides an indirect proof of the claims of the Aesthetic. Upon examining the character of empirical judgments we find that they rest upon certain assumptions about space and time and can be validated only if these assumptions are true.

Kant claims in the Aesthetic that we are intuitively aware of certain characteristics of space and time. But so far as the argument of the Aesthetic is concerned this must remain a statement of fact, a dogmatic assertion. It is open for anyone to object that upon inspection he does not find space and time to have the properties which Kant offers. In reply to such an objection Kant must maintain, as he does, that if these conditions of intuition are not met empirical knowledge is impossible. For example, if two spaces are not related spatially we cannot unite the data of our perceptions in one consciousness.³⁵ Moreover it is only in so far as appearances are given in one time and one space that we can make any valid judgments at all about them. It will be up to the person who denies Kant's thesis to explain how it is that he can be conscious of two spaces which are not themselves related and connected in one space. To deny Kant's claims about the intuitively given characteristics of space and time it is necessary to challenge his analysis of consciousness and empirical knowledge. If Kant is mistaken in maintaining that all of our empirical knowledge rests upon the intuition of space and time as homogeneous, unitary, and infinite then one can deny his claims about intuition in the Aesthetic.

³⁴ Cf. note 23 *supra*; B162.

³⁵ A214-B261.

If Kant's argument in the Aesthetic be granted he has proved that space and time are the formal conditions of all sensuous intuition. He has established that all appearances are in space and time. This implies that space and time constitute the matrix in which the determinate and variable content of intuition is given and that they are individual and invariant. In insisting that we intuit space and time Kant intends to emphasize the fact that space and time are individual, that they must be given intuitively rather than conceptually. This prompts him to overstate his case and to maintain that space and time are given through intuition alone. But if we recognize that this doctrine requires the supplementation of understanding as developed in the Analytic it need cause us no great difficulty.

Two senses of a priori. Actually Kant is seeking to establish the a priori of space and time in two senses: a) as forms of the sensible manifold, and b) as forms of appearances which can be cognized a priori. We can know that space and time are a priori with respect to the sensed manifold but can we know the characteristics of space and time a priori? To establish the first point is not sufficient to establish the second. Kant must show that both propositions are true; yet he fails to distinguish adequately between the two kinds of a priori and the separate proofs required to establish them. His argument in the Aesthetic suffers considerably from his failure to make this distinction. So far we have been concerned with the proof of the first point, which we may accept for the moment as established. The question that remains is: how does Kant prove that we have a priori knowledge of the nature of space and time? In proof of this point he advances the following arguments: a) that our knowledge of space and time is not arrived at inductively, b) that we have a priori knowledge of space and time in the case of geometry and arithmetic, respectively. Since his theory of the function of time in validating arithmetical judgments was never carefully worked out we must limit ourselves to his treatment of geometry.

The propositions of geometry are a priori, Kant asserts. They are acknowledged as true statements about space. Hence

our knowledge of space cannot be arrived at inductively.³⁶ This conclusion prompts Kant to advance the very difficult notion of an a priori intuition of space. It is evident that in the case of geometry we are not dealing with intuition alone. As Kant later points out the categories of understanding are required for any cognition of space. If, as Kant believed, the space of geometry is isomorphic with physical space, we do in fact have a priori knowledge of physical space. But it remains to be shown that this is the case. Kant's argument from geometry in the Aesthetic is quite dogmatic and begs the question by assuming the point at issue, namely that geometrical space and physical space, the space of intuition, are identical or at least isomorphic. Since the space of Euclidian geometry is an interpreted and conceptualized space it does not follow logically that it is true of intuited space. A deduction must be provided for space and time, as Kant admits.³⁷ This deduction must establish: 1) that space and time are the forms of the sensible world, and 2) that the space of geometry is isomorphic with the space of intuition. The latter point is the crucial one for the deduction, yet it is dismissed by Kant altogether too easily. This would be an even more serious deficiency in his exposition were it not for the fact that he seeks to establish certain a priori characteristics of space and time in the Analytic as necessary for the possibility of experience.

Kant has been frequently criticized for assuming that Euclidian geometry is the only possible theoretical interpretation of physical space. This criticism is just, but it should not lead us to overlook the fact that the characteristics of space and time which Kant emphasizes in the Aesthetic and the Analytic do not commit him to this position. In the final analysis Kant's argument in the *Critique* no more rests upon his acceptance of Euclidian geometry than upon his acceptance of Newtonian physics. Certain characteristics of space and time must be known a priori, namely that they are unitary, homogeneous, and infinite. Otherwise empirical knowledge is impossible. It can be maintained against Kant that space is finite but unbounded, and, further, that it is not homoloidal.

³⁶ B41.

³⁷ B121.

Kant would not find it necessary to object to the first point. So long as all appearances are given in one space, which though finite is unbounded, Kant would, I think, be content. He did believe, however, that space is indifferent to the matter in space and is unaffected by it. The point is still disputed by the scientists themselves and I am not competent even to express an opinion about it. However, it does seem that if our empirical knowledge is about objects in one space, then there must be certain characteristics which are true of all segments of space. Certainly if any theoretical geometry is true of physical space this must be the case. If we deny that what is necessarily true of one segment of space is not true of other segments, we have denied one of the conditions which makes a priori knowledge, and if Kant is right, empirical knowledge of the physical world possible.

The Ideality of space and time. If my analysis is correct, a priori knowledge of the nature of space and time has not been established in the Aesthetic. This could not, in the nature of the case, be proved in the Aesthetic which is concerned with intuition alone. Knowledge, as has been pointed out, requires both intuition and judgment. We must take the Aesthetic as a provisional argument, making explicit the claims of intuition, but in need of further support from understanding.

There are two cardinal points about space and time which Kant must demonstrate if he is to solve the problem of schematism: He must show that: a) space and time are given through sensation, i.e., that they are intuited, and b) that they are both material and formal. Kant is often interpreted as having maintained that space and time are imposed upon sensations by the sensibility. This obviously would imply a duality between space and time as forms and the given content of sensation. Kant would be obliged to show why the manifold is ordered in space and time and why the concrete ordering of events in space and time is what it is. It is evident that the particular shapes and sizes of objects must depend upon the objects themselves. Otherwise there would be nothing on the side of the given to constrain the understanding in its synthetic activities; there would be no empirical criterion of truth. To assert that all objects and events must be ordered

in space and time and yet to maintain that the determinate ordering of events and objects is solely the work of understanding would be absurd. Presumably one could arrange the temporal order of events to suit his purposes. The understanding would be fully satisfied to have events in one coherent time, but it would be at liberty to arrange the determinate time order to suit itself. In other words there would be no constraint imposed either by sensibility or understanding to necessitate the concrete ordering of objects and events in space and time. If, as Kant held, it is only the fact that events are ordered in space and time that enables us to distinguish between reality and illusion, there must be a determinate spatio-temporal order which is intrinsic to the given and which constrains the understanding as it seeks to articulate the sensible manifold.³⁸

It would be generally admitted, I think, that Kant did not hold this view, that he recognized that the determinate order of events in space and time is given. But why, we may ask, need the given submit to the forms of space and time at all? How can we establish the necessity of the relation between form and content if the form is extraneous to the content and arbitrarily imposed upon it by mind? The answer is that we can't. Unless space and time are given in intuition on a level with and in the same way that the sensed content is given there is no way in which we can relate them.

When Kant says that space and time are real, that they are intuited I think he means to maintain that they are given through sensation. As such they are forms of the manifold, as we discover upon analysis, but nonetheless material. Space and time have and must have a double status for Kant. They must be material, given through sensible intuition with the content of the manifold, and, also, formal, that is determinable a priori through concepts. Space and time are both sensible and conceptual, given through sensation and conceptualized by understanding. This is one of the most crucial and fundamental doctrines in the *Critique*. The deduction of categories depends upon it and the success or failure of the transcendental method of proof rests or falls with it.

³⁸ *Prol.*, Sec. 11, Remark III.

It is interesting and significant that Kant refers to the *pure a priori* manifold of space and time. In spite of the fact that space is the form of the intuited manifold, it too has a certain manifoldness about it which must be determined conceptually.³⁹ The important point is that we know *a priori* that whatever conceptual properties hold for any particular space must hold for the whole of space. Moreover, in so far as we have *a priori* conceptual knowledge of the character of space we have *a priori* knowledge of experience.⁴⁰ In the final analysis all of our *a priori* knowledge of experience is knowledge of space and time. The more determinate knowledge of objects and events must be arrived at inductively and is only probable. All synthetic *a priori* propositions represent determinations of space and time, and, indirectly, of objects and events in space and time.

I have suggested that space and time are given in intuition and I mean to insist that they are, in this regard, on the same level empirically with intuited data.⁴¹ I think that this is what Kant means to maintain in asserting that space and time are empirically real. It is beyond the scope of this paper to examine Kant's argument in the *Analytic* that our empirical knowledge rests upon *a priori* knowledge of space and time. I can only reiterate what has already been said above, namely that the argument of the *Aesthetic* is provisional. It cannot make out its case apart from the meticulous examination of objectivity, cognition, and experience in the *Analytic*. Kant's argument in the *Analytic* moves in two directions to establish the same point. He seeks to show that the categories are necessary in order to cognize events in one space and one time and that all empirical judgments rest upon the assumption

³⁹ B160 note: "Space, represented as object (as we are required to do in geometry) contains more than a mere form of intuition; it also contains combination of the manifold... so that the form of intuition gives only a manifold, the formal intuition gives unity of representation." Cf. A24-B39.

⁴⁰ B204-A164, A214-B261; cf. A245-B303 note: "In a word, if all sensible intuition, the only kind of intuition we possess, is removed, not one of these concepts can in any fashion verify itself, so as to show its *real* possibility."

⁴¹ B44-A28, A29, Prol., Sec. 11, Remark III.

that space and time are unitary. If Kant succeeds in showing that objectivity presupposes certain characteristics of space and time, this serves as an indirect proof of the necessity of those properties of space and time. He argues that we do have empirical knowledge, and that empirical knowledge depends upon certain assumptions about time and space, and, hence, that those characteristics are necessary for the possibility of experience. It is important to note that Kant does not rest his case with any dogmatic assertions about the revelations of intuition. He attempts to show that what intuition reveals about space and time is presupposed in empirical judgments and, further, that it must be presupposed. This constitutes the deduction offered for space and time. The deduction of categories is itself a deduction of space and time. In showing that causality is a category necessary for the possibility of experience Kant demonstrates that time must be unitary. Without the unity of time the principle of causality would not be valid.⁴² Yet, it is only through the synthesis of the manifold in accordance with the category of causality that we cognize the unity of space and time.

There appears to be an inconsistency and perhaps a contradiction at this point between the Aesthetic and the Analytic. In the Aesthetic it was claimed that we have intuitive knowledge of the unity of space and time. But in the Analytic Kant maintains that we know space and time as unitary only because of the synthetic activity of imagination and understanding which operate in accordance with the categories. Actually, there is no inconsistency. In the first place it must be observed that in the Aesthetic Kant is concerned with the pure intuitions of space and time, that is with space and time apart from content. Moreover, he is not talking about knowledge, in the strictest sense of the word, but about intuition which is necessarily vague and inarticulate. In the Analytic, on the other hand, he is concerned with the knowledge of objects and events in space and time. There is nothing inconsistent or paradoxical about maintaining that we have an intuitive awareness of the nature of space and time and, at the same time asserting that knowledge of the unity of physical

⁴² B256-A211.

space and time is arrived at only through the synthesis of the manifold by the understanding.⁴³ After all, intuition does not precede judgment temporally. We do not first have blind intuition and then the articulation of this content by understanding. The Experience with which we begin is filled with objects and events; otherwise it would not be Experience at all and we would not be able to say anything about it. We would have no empirical consciousness. Space and time as intuited must be separated out from space and time as cognized through understanding. It is perfectly consistent and plausible to maintain that intuition underlies and governs the cognitive process of understanding.

Part of the difficulty arises from the fact that synthesis itself is not, for Kant, exclusively a temporal process. To be sure, he talks about the synthetic activity of imagination and undoubtedly means to refer to a temporal process. Knowledge is arrived at in time and Kant maintains that empirical consciousness itself is in time. However, the transcendental principles which make possible the cognition of time and empirical consciousness are not in time. The understanding of which Kant speaks in the *Analytic* is not in time, but is the condition of our knowledge of time itself.⁴⁴ The transcendental syntheses which underlie all empirical synthesis are not in time but provide the ground of existence in time. Not all synthesis is temporal; our knowledge of space and time does not require a temporally prior synthesis of the manifold.

Kant actually held to the view that space and time are both relational and absolute.⁴⁵ Intuition presents space in its absolute and non-relational character, whereas understanding is concerned with the relational aspect of space and time. Kant says over and over again that apart from objects space and time are nothing. They cannot be perceived or known

⁴³ B140, B160 ff.

⁴⁴ A95, A106, B130.

⁴⁵ B341-A285: "But something is contained in intuition which is not to be met with in the mere concept of a thing; and this yields the substratum, which could never be known through mere concepts, namely a space which with all that it contains consists solely of relations, formal, or it may be also real." Cf. A173-B215.

in themselves. This means that in the case of geometry we are dealing with space in isolation from all content. It is at once absolute and relational, both pure and manifold. The Aesthetic is almost exclusively concerned with the absolute character of space as given in intuition whereas the Analytic is primarily concerned with the relational structure of space. Intuition gives us space as material, inchoate, undetermined; understanding presents us with the formal, conceptual limitations, or determinations of space. Space must serve both as the container of experience, as the matrix in which all objects appear, and also as the tissue of relations within the manifold.

In spite of all appearances to the contrary Kant is dealing with space and time metaphysically. The critical philosophy has been very properly entitled a "metaphysic of experience." The problem of the relation of space and time to the manifold is the age-old problem of form and matter. Kant obviously cannot demonstrate that space and time themselves are necessary, either phenomenally or ontologically, but only that they are necessary forms of appearances. The necessity of space and time is, in short, a contingent necessity. It is grounded in appearances; it is relative to the given. The form of experience is just as much dependent upon the matter of experience as the matter is dependent upon the form.⁴⁶ If this connection between form and content can be established as necessary Kant will have succeeded in proving the point he needs to make. It will still leave experience itself, both form and matter, contingent and ungrounded, and this must be regarded with some dissatisfaction by reason, as Kant himself admitted. This is true not only of space and time but of all transcendental principles in the *Critique*. Their necessity is strictly relative, grounded in the contingent realm of appearances.⁴⁷

⁴⁶ B457: "Empirical intuition is not, therefore, a composite of appearances and space (of perception and empty intuition). The one is not the correlate of the other in a synthesis; *they are connected in one and the same empirical intuition as matter and form of the intuition.*" (My italics) Cf. A452-B480.

⁴⁷ In the exposition of the Fourth Antinomy Kant denies the possibility of any proof of a necessary being, be it God or nature. "Possible experience" is, for Kant, "*bedingt-notwendig.*" A605-B633.

The transcendental status of space and time. I have maintained that Kant did not hold that space and time are either psychologically necessary or psychologically ideal. It remains to be considered in what sense and for what reasons Kant held that space and time are ideal. Kant offers two main arguments for the ideality of space and time: 1) the indirect proof of the antinomies, and 2) the direct proof of the Aesthetic and Analytic based upon the a priority of space and time.

The indirect proof of the ideality of space and time attempts to show that if space and time are taken to be real, insoluble contradictions follow. This proof of ideality is completely independent of the argument of the Aesthetic and Analytic. The main argument of the *Critique* would be unimpaired, in fact, if the entire section of the Antinomies were to be eliminated. That the Antinomies played a role of some importance in the development of Kant's critical position is not questioned. But as he worked out the positive doctrines of the *Critique* his transcendental idealism was provided with an independent foundation which in no way rests on the Antinomies.⁴⁸ Kant's idealism does not depend upon metaphysical skepticism but rather upon his theory of the a priori.

The Antinomies of space and time turn upon the problem of infinity. The argument attempts to show that space and time must be both finite and infinite and since this involves a self-contradiction, they cannot be real entities. This indirect proof of ideality fails for the following reasons: 1) contradictory conclusions about space and time are not demonstrated as required for a genuine antinomy; 2) even if the antinomies were valid as presented they would not demonstrate the unreality of space and time. At most they would prove that we had not succeeded in finding a satisfactory theoretical formulation of the nature of space and time; 3) any antinomies which embarrass a realistic view of space and time must reappear in Kant's phenomenalism. Kant maintains that phenomenal space is infinite, that it is continuous, and, yet, that it is an extensive magnitude. Space is real, if only as appearance,

⁴⁸ A506-B534.

and presents all of the theoretical difficulties which occur on a realistic interpretation.⁴⁹

The direct proof of ideality consists in showing that space and time are a priori and that they could not be a priori if they were things in themselves. I have attempted to point out that there is a serious ambiguity involved in the a priority of space and time. This can mean: a) that they are forms and, as such, a priori to the variable content of sensation, and b) that the nature of space and time is cognized a priori. It is virtually a dogma with Kant that whatever is a priori must be ideal. However, he does not argue from ideality to a priority but from a priority to ideality. His argument can be summarized in the following way: space and time are necessary forms of appearances; moreover, they are a priori to the sensible manifold as form to content and, hence, are necessary conditions of possible experience; finally, whatever elements in experience are necessary must be mind-contributed and, hence, ideal. The proof of a priority and necessity is independent of any proof of ideality. It is quite possible to accept Kant's arguments for a priority and reject his idealistic explanation.

Kant's view of mind. The difficulty in interpreting Kant's position hinges on what is meant by "mind-contributed." One thing I am sure is not meant, namely that space and time or the a priori characteristics of space and time are contributed by the individual empirical consciousness. In other words mind must not be taken in the usual subjective sense. Nothing is more fundamental in Kant than that the self as known is a phenomenal self in time distinct from the transcendental self, which is presupposed as the ultimate condition of the possibility of experience. Most of Kant's followers have been dissatisfied with his treatment of the self, and have tended to regard the transcendental self either as the individual knower, the pure subject, or as an absolute mind or spirit. I suspect that the Hegelians are much closer to the truth than those who would read Kant through the eyes of Descartes and Locke. Whatever else may be said about the mind which

⁴⁹ Cf. Ewing, *op. cit.*, pp. 93 ff.

contributes necessity to experience, it is not the individual knowing subject. Anyone who has read Kant's scathing treatment of Descartes's subjectivism should have little doubt on this point.⁵⁰ This is one place where I think it is more profitable to read the history of philosophy backwards. One can understand Kant's theory of mind better by working his way back from Hegel and the absolute idealists than by working forward from Descartes and Locke.

For Kant mind stands both within and outside of experience. It is both conditioned and unconditioned, phenomenal and transcendental. As standing within Experience the mind is subject to the conditions of space and time and the categories. It is an object among objects. It is not known as universal law-giver, as the faculty which is prescriptive of the laws of nature, but as itself subject to transcendental laws. The mind which is prescriptive, which contributes the necessity to experience, always stands outside of Experience.

Paulsen has maintained that Kant's idealism is a formal idealism. I believe that his interpretation is essentially correct on this point.⁵¹ The formal, structural aspects of experience which make possible its existence as a world, which gives it its rationality, are ideal. Necessity can be comprehended only by mind and, so Kant believed, can be accounted for only as the work of mind. But the sort of mind which is capable of imposing an intelligible framework upon appearances must have some sort of cosmic status. Anything short of a cosmic mind which enjoys a metaphysical status transcending experience must fail miserably to account for the necessity of transcendental principles. Since these principles, including space and time, are the conditions of the possibility of experience they cannot be accounted for by anything within the phenomenal world. Since it cannot be the phenomenal self which contributes the a priori, either it must be the noumenal self or the transcendental ego. Kant cannot attribute this

⁵⁰ B275, A368. In the Refutation of Idealism it is primarily Cartesian idealism (subjectivism) which Kant is attempting to refute.

⁵¹ Cf. A491-B519 note; Paulsen, *Entwicklungsgeschichte der K. Erkenntnistheorie*, pp. 191 ff.

capacity to the noumenal self since we have no knowledge of it. In maintaining that the necessity of the a priori is mind contributed Kant must have meant to attribute this power to the transcendental ego.

Norman Kemp Smith has urged that Kant vacillated between a subjectivist and a phenomenalist view of reason. This may be true and I am sure that a good deal of Kant's language is strongly suggestive of a Cartesian point of view. However, Smith also maintains quite correctly that the critical or transcendental position, which is central to the *Critique*, is not subjectivist in this sense. I have stressed the phenomenalist side of Kant's position since I have been concerned exclusively with his transcendental method of proof. The direct proof of the ideality of space and time fails since it is not implied by Kant's arguments for transcendental necessity. Since the a priori must, on Kant's argument, be mind-contributed because it is transcendently necessary rather than the reverse, to establish the transcendental necessity of space and time is not to prove their ideality. Moreover, to maintain that the a priori is mind-contributed does not explain the necessity of transcendental principles. The necessity must be established on logical and metaphysical grounds. Only if it be assumed that all necessity must be mind-contributed is Kant's idealism justified.

IV

SUMMARY AND CONCLUSIONS

I have attempted to establish the following points: 1) that space and time are not psychologically necessary or psychologically ideal, 2) that space and time are a priori in two senses: a) as form to content, b) as determinable a priori, 3) that the argument in the Aesthetic for the transcendental necessity of space and time as forms of the sensible manifold is only provisional. It demonstrates neither the universality nor the necessity of space and time as forms of appearances, 4) that in the Analytic Kant seeks to complete the argument of the Aesthetic by showing that space and time are necessary conditions of possible experience, 5) that space and time are

both material and formal, given both intuitively and conceptually, 6) that space and time are not mind-contributed, in the subjectivist sense.

The main point of this paper has been to emphasize the fact that space and time have a double status for Kant, and thus can provide the mediation necessary to relate concepts to intuition. I think Kant's handling of the problem of schematism can be better understood if, instead of speaking of the relation of concepts to intuition, we talk of it in terms of the relation of form to content. The lesson to be learned from a study of Kant's analysis is that unless the duality between subject and object is bridged it is impossible to account for knowledge. Kant sought to overcome this gulf by embarking upon metaphysics. It is in Experience, which includes both subject and object under the forms of space and time, that the mediation is to be found.

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Critical Studies

FREGE'S ONTOLOGY

I

FREGE'S SIGNIFICANCE FOR ONTOLOGY

§1. *Frege's primary contributions.* We remember Gottlob Frege (1848-1925) for three primary contributions. He made proof in mathematics and logic more precise and airtight, he showed how the basic notions of logic and mathematics could be assimilated to each other, and he produced a workable philosophy of mathematics. The ideals toward which he was working were common in his day, particularly in Germany, but he took them with supreme and unique seriousness.

It is Frege's third contribution that makes the point of departure for the present paper. Not merely did Frege show how to manipulate symbols more exactly; he also gave a searching account of what these symbols mean. Consider a philosophical problem that arises out of the simplest arithmetic. When we say that $5 = 2 + 3$, what do we mean? Do we mean that 5 is identical with $2 + 3$? But in some ways 5 and $2 + 3$ are obviously different. Or do we mean that 5 and $2 + 3$ are equal but not identical, equality being a relation that falls short of complete identity? But in that case, some ordinary ways of speaking in mathematics must be false. Suppose a pupil is asked for the positive square root of 25. The phrasing of the question implies that there is one and only one. No doubt he may answer, '5'. But then it follows that the answer ' $2 + 3$ ' is not allowable, since *ex hypothesi* 5 and $2 + 3$, though equal, are not identical. Yet ordinarily the answer ' $2 + 3$ ' would be regarded as strange but not as wrong.

So it is not easy to say what we mean by '=' in arithmetic. Now consider the question, What do we mean when we say that $x^2 - 4x = x(x - 4)$? Here we have not only the problem about '=', but the further problem, What sort of things are $x^2 - 4x$ and $x(x - 4)$? Whether we are asserting identity or only equality, what are we asserting it between? Most mathematicians would say that these two things are

functions, but what are functions? They are not simply numbers; what, then? And for that matter, what are numbers?

§2. *Implications for semantics.* By way of illustration, two questions about mathematical equations were raised in the previous section. The first of these Frege answers by saying that '=' denotes complete identity. Now this answer, and indeed any answer to the question, has implications for semantics, the science that describes meaning-relations. That is, there are certain semantical theories with which it would be incompatible; for instance, any theory which held that the sign '=' does not denote at all, but has meaning in some other way. Similarly, Frege's answer to the second question above has such implications. His answer (*Function 9*)¹ is that in ' $x^2 - 4x = x(x - 4)$ ', the left member and the right member denote ranges (*Wertverläufe*, see §11). This doctrine obviously entails that the two members denote *something*, i.e. enter into the denoting-relation; and this is an implication for semantics.

In like manner, any doctrine of what certain symbols mean, no matter what or how few these symbols are, has semantical implications. Even if a semantical theory be conceived as purely general, not concerned with details, still it must be *compatible* with all details. In this quite obvious way, Frege's and anybody's ascription of any kind of meaning to

¹ The following system of reference is used. (a) Books and articles are cited by italicized title, usually abbreviated; the full title is given in the bibliography. (b) Many citations give not only the page but the paragraph and sometimes even the lines. E.g. 'Frege *Grundgesetze* 1.VIa1' identifies Frege's *Grundgesetze der Arithmetik*, volume 1, page VI, the first line of the first paragraph, i.e. the top line of the page. When it is convenient to count from the bottom rather than the top, the letter indicating the paragraph or the numerals indicating the lines will be italicized. E.g. 'Frege *Grundgesetze* 1.13a4' identifies the fourth line (counting from the top) of the first paragraph counting from the bottom. When a page is divided into columns, the left one is indicated by superscript 'a' and the right one by superscript 'b'. E.g. 'Frege *Grundgesetze* 1.27^ba6' identifies the sixth line from the bottom of the page, in the right-hand column; this line reads 'Man darf ein Unterglied mit'. Because this entire column happens to contain only a single paragraph, with many symbols which would make line-counting difficult, it is easier to identify the line in question by counting from the bottom.

any symbol has semantical implications. In Frege's philosophy of mathematics there are many such.

There is a second way in which his philosophy of mathematics has semantical implications: He develops an explicit and general semantical theory. This theory is primarily designed to accommodate his philosophy of mathematics, but he gives it much more general application. In his essay *Ueber Sinn und Bedeutung* (1892)² he begins by posing the problem of identity, and works out the answer that, for instance, the expressions '5' and ' $2 + 3$ ' denote the same number, but differ in 'sense'. (See §14 for a discussion of his notion of sense.) Then in the same essay he shows how his distinction between sense and denotation is workable and illuminating not only in mathematics but quite generally; and thus he arrives at a general semantical theory. According to it, there is no difficulty in saying that 5 and $2 + 3$ are completely identical; the obvious differences between them mentioned in §1 turn out, on more careful scrutiny, not to be differences in the numbers themselves but merely in the expressions. Consequently, a meticulous and unwavering distinction between expressions and what they denote is enjoined (Cf. §26, (A)); and Frege proves (cf. fn. 28) that though this vital distinction is obvious when so stated, many abstruse reasonings obliterate it. His emphasis on the distinction is itself a semantical contribution.

§3. *Implications for ontology.* Frege's philosophy of mathematics has implications for ontology, as well as for semantics; and his semantical doctrines themselves have ontological implications in turn. However one may conceive ontology, it surely includes the task of describing the major kinds of being. That is, every ontological system will include a list of categories — or will be incomplete. And while an ontologist need not, in addition to listing his categories, list the things categorized, still all things to be categorized must admit of being relegated to one or another category in his list. If Frege

² For discussion of this famous essay, see Carnap *Meaning*; Church, all articles cited in bibliography; Jones *Objections*; Russell *Principles* Appendix A, *On denoting*, and *Knowledge* 225 et seq; and Wienpahl *Sinn*. See also §§14-19 of the present essay.

says that the sense of the expression ' $2 + 3$ ' is an entity, and a certain ontologist's list of categories makes no provision for such an entity, then either Frege or that ontologist is wrong. If the ontologist is wrong, he might be wrong either by expressly denying that the sense of ' $2 + 3$ ' is an entity, or by being incomplete — by neglecting to pronounce on the matter one way or the other.

In the same way, Frege's entire semantics has ontological implications. To a limited extent, Frege himself develops these into an explicit contribution. For instance his essay *Ueber Begriff und Gegenstand* (1892) explains his two basic categories of being, function and object, and the grammatico-semantic basis on which they rest. (Cf. §12.) But there is room for a systematization of his ontology, based upon his own declarations and hints, yet going considerably beyond any exposition that he has left us. Such a systematization is the more in order, as Frege's ontology has been neglected in favor of his semantics. His contribution to semantics has attracted more attention not because it is more extensive — although it is — but because (a) our age is in general more interested in semantics than in ontology, and (b) the indispensable qualification for studying his contribution to either subject, viz. an interest in symbolic logic and a fair acquaintance with it, is considerably more common among semanticists than among ontologists.

In this paper I shall concentrate on Frege's ontology. The ontological implications of his mathematical philosophy and his semantics will be explicated; and the resulting statements, together with the ontological doctrines that he himself makes explicit, will be integrated into a system. This is the exegetical part of my task.

§4. *Further ontological relevance of Frege's system.* Frege's ideas have two further relevances for ontology, which will not be discussed in this paper but must be mentioned for the sake of clarity. (1) According to traditional Aristotelian doctrine, speculative philosophy is comprised of metaphysics (first philosophy), mathematical philosophy, and the philosophy of nature. Ontology in the Wolffian sense is general metaphysics. Now the second of Frege's three contributions

mentioned in §1 breaks down the sharp distinction between mathematics and logic,³ and this breakdown may well have repercussions in ontology. (2) Frege's ontological contribution is mainly concerned with abstract entities such as functions, senses, ranges, and so on. Many ontologists today, especially moderate realists in the Aristotelian tradition, would regard all these as beings of reason (*entia rationis*). Frege takes a more extreme-realistic view of them, but that is irrelevant to the point I wish to emphasize here. The whole subject of abstract entities is suffering comparative neglect from most ontologists.⁴ Frege's categories should command their attention.

§5. *Frege's ontological method.* Frege concludes that his system of semantics and ontology is not merely an adequate foundation for mathematics, but the best and only adequate foundation. Somewhat like Kant, he takes certain beliefs for granted and asks what they presuppose, i.e. under what conditions they could be true. In arriving at his conclusion, he makes a mistake that is extremely significant. He establishes the adequacy of his own system and the inadequacy of sundry others that have been previously propounded; and by an amazing leap in the argument he infers that his system is the only adequate one. Now in Part V, where this mistake of Frege's is analyzed in detail, it will be suggested that although the mistake seems egregious, it is committed to one extent or another by nearly all philosophers.

II

EXPOSITION OF THE SYSTEM

§6. *A table.* Frege's ontological system lends itself to

³ Though it does so by introducing into logic the novel notion of range (cf. §11). Concerning this notion, Frege says (*Grundgesetze* 1.VIIb near end): "I regard it as purely logical." In any case it is surely far too general to be purely mathematical.

⁴ Lack of preoccupation with the abstract entities of logic and mathematics seems to be correlated with Aristotelianism, as contrasted with Platonism over the issue of the status of 'ideas'. It appears that one can be an Aristotelian on this issue without being an unqualified Aristotelian. All that I ask readers of the present paper to grant is that the topic of logical and mathematical entities is, whether a central or a subordinate part of ontology, still genuinely a part of it.

schematic presentation. All entities may be classified as:

A. Objects

1. Ordinary denotations
 - a. Truth-values
 - b. Ranges
 - c. Function-correlates
 - d. Places, moments, time-spans
 - e. Ideas
 - f. Other objects

2. Ordinary senses

B. Functions

1. Functions all of whose values are truth-values
 - a. With one argument (concepts)
 - b. With two arguments (relations)
2. Functions not all of whose values are truth-values
 - a. With one argument
 - b. With two arguments

§7. *Functions.* The notion with whose exposition it is best to begin is the notion of function. This notion itself is taken over from mathematics; but Frege rejects all previous accounts of it, for he holds that all of them involve confusion between expressions and their denotations. In particular, all of them give a hopelessly wrong account of variables. (Cf. §21.) To analyze what we mean by a function, it is best to study a concrete example (*Function 6*).⁵

The notion of function is inseparable from the notions of argument and of value. The following three expressions exhibit the same *function* but with different *arguments* (*Function 6*): (a) ' $2.1^3 + 1$ '; (b) ' $2.4^3 + 4$ '; (c) ' $2.5^3 + 5$ '. Furthermore, each of these three expressions has a *value*. Frege proposes to analyze 'has' here⁶ as meaning 'denotes'. The argument of (a) is the number 1; of (b), 4; and of (c), 5. The value denoted by (a) is the number 3; by (b), 132; and by (c), 255. (Inci-

⁵ Cf. fn. 1.

⁶ Not everywhere; for instance, when we say 'this expression has a sense', 'has' means in effect not 'denotes' but 'expresses'. Cf. §14. Frege's terminology is to say that an expression *denotes* its denotation but *expresses* its sense. Of course the sense in which *expressions* have values is different from the sense in which *functions* have them.

dentally, Frege would say that both the compound numerical expression ' $2.1^3 + 1$ ' and the simple numeral '3' have the same value, i.e. denote the same object: the number 3.) Moreover, Frege would say that the expression ' $2.1^3 + 1$ ' does not literally contain an argument; it contains an expression '1', occurring twice, which denotes an argument. The argument is thus not a symbol but something symbolized. Now because of parallel considerations, and for further reasons to be stated in §26, he takes the same view of functions; they are not (in general) symbols but are what certain symbols symbolize.

If expression (a), (b) and (c) exhibit the same function, what does 'exhibit' mean here? Presumably, Frege reasons, that there is some component expression, present in all of them, that denotes the function. It should be whatever is left after we strike out the argument expressions, sc. ' $2. \quad + \quad$ '; or as Frege would write it, ' $2.\xi^3 + \xi$ '.⁷

§8. *Analysis of values into functions and arguments.* Frege would say that the function denoted in isolation by ' $2.\xi^3 + \xi$ ' and the argument denoted by '1' combine to produce the value denoted by ' $2.1^3 + 1$ ', i.e. 3. But it is important to realize, and his exposition — especially in *Begriff* and *Verneinung* — makes the point sufficiently clear, that, given a complex expression such as ' $2.1^3 + 1$ ', there is no unique answer to the question 'What function and what arguments are denoted in this expression?'. What one can say is that if $2.\xi^3 + \xi$ is the function, 1 is the argument; if $2.\xi^3 + \xi$ is the function, 1

⁷ The introduction of a letter such as ' ξ ' serves two purposes: (i) it is visually clearer than the use of blank spaces; (ii) it makes possible a differentiation between, for example, the two functions $2.\xi^3 + \xi$ and $2.\xi^3 + \xi$. To show that these are different functions it is sufficient to note that the former is a function requiring one argument and the latter a function requiring two arguments. Again, $\xi = \xi$ is a different function from $\xi = \xi$; for (i) the former is a function of one argument, the latter a function of two; (ii) the former has only one value — the True, no matter what the argument, whereas the latter has this value for some pairs of arguments but the False for others.

The function $2.\xi^3 + \xi$ like the function $\xi = \xi$, is a function of one argument although the same argument occurs twice. Cf. *Grundgesetze* 1.8 §4.

and 1 are the respective arguments; if $\xi.1^3 + \xi$ is the function, 2 and 1 are the respective arguments; if $2.1^{\xi} + 1$ is the function, 3 is the argument; if ξ is the function, $2.1^3 + 1$ is the argument; etc. To put the matter in another way, ' $2.1^3 + 1$ ' can be regarded as exhibiting the same function as ' $2.4^3 + 4$ ', or as ' $2.4^3 + 7$ ', or as ' $4.1^3 + 8$ ', or as ' $2.1^0 + 1$ '; etc. Given an expression and the function that it denotes, one can ascertain the arguments; given the expression and the arguments, one can determine the function.

So far it seems as if a function, though not identical with an expression, is identified by it. In other words, it seems as if no two expressions identify the same function. It appears that Frege does not mean to admit this extreme consequence; on the other hand, he is prepared to admit that there can be functions that are different from each other even though they have precisely the same values for the same arguments. (*Function* 9a-b, to mention a single example, says that $\xi(\xi - 4)$ and $\xi^2 - 4\xi$ are different functions even though they have the same range, i.e. the same values for the same arguments.) This is tantamount to rejecting so-called extensionality of functions. We can only say that Frege has not laid down for us conditions under which different expressions identify the same function.⁸

§9. *Mathematical generalization.* So far, in our discussion of functions, we have only been describing how Frege

⁸ Similarly, he does not lay down complete conditions under which different expressions with the same denotatum have the same sense; cf. §14 and fn. 14. It is not clear that Frege has any good reason for rejecting extensionality of functions. And in fact some of the functions he introduces are extensional; namely, all functions defined by specifying their range, i.e. by specifying their values for all possible arguments. Intensionality of functions appears all the more superfluous, since the sense-denotation distinction could be invoked as follows. Every function-name has a sense as well as a denotation; so the function-expressions ' $\xi(\xi - 4)$ ' and ' $\xi^2 - 4\xi$ ' could be held to denote the same function but to have different senses. It appears that Frege simply neglects to articulate his sense-denotation distinction with his concept of function; cf. *Sinn* 27b where he expressly refrains from integrating them. Cf. also Church *Introduction* 22b-3a §03.

clarifies the notion as it is used in mathematics, and not how he generalizes it. But a process which we shall call mathematical generalization (cf. §28) is one of Frege's major techniques. We so name it, not because mathematics has any prerogative over it, but because it is a recognized method in mathematics and because in applying it elsewhere Frege consciously takes mathematics as his model. And by applying this mathematically inspired method to some mathematical notions — **function** and **correlative notions**, Frege arrives at the keystone of his ontological system.

§10. *The notion of function generalized.* Frege proposes (*Function* 12b ff.) to generalize the notion of function beyond the sphere of mathematics. In mathematics or at least in arithmetic and algebra, the arguments and the values of functions are numbers. But according to Frege's generalized conception, any entity — whether object or function — is fit to be an argument of some function, and a value of some function. For example, Eve is the value of the function the mother of ξ , for the argument Cain.

In particular, truth-values (see §18) are fit to be values of functions; and the functions of which they are values are what are commonly called concepts and relations. So, by clarifying and mathematically generalizing the mathematical notion of function, in the light of the common-sense assumption that functions cannot be mere expressions, Frege is able to encompass the common-sense notions of concept and relation and give an account of them.

It is inherent in the nature of a function that a certain fixed number of arguments is required to satisfy it,⁹ and that by or

⁹ Frege does not quite fully state what he manifestly means. ξ^2 is a function of one argument; $\xi + \xi$ and $\xi = \xi$ are functions of one argument also; $\xi + \zeta$ and $\xi = \zeta$ are functions of two arguments. Now it is not required that ξ and ζ be distinct; $2 + 2$, for instance, is a value of $\xi = \zeta$ for the arguments 2 and 2 respectively. But to get from ' $\xi + \zeta$ ' to ' $2 + 2$ ' requires *two* substitutions: '2' for ' ξ ' and '2' for ' ζ ' (the order of substitution is here immaterial). Whereas, to get from ' $\xi + \xi$ ' to ' $2 + 2$ ' requires only *one* step: substitution of (an occurrence of) '2' for (each occurrence of) ' ξ '. So it is misleading to speak of the number of arguments required to satisfy a function as fixed. It is more accurate to say that the maximum number is fixed.

in itself it is unsatisfied (*ungesättigt, unerfüllt*).¹⁰ The function ξ^3 requires one argument, the function $\xi > \zeta$ requires two; the function ξ is between ζ and η requires three. Functions all of whose values are truth-values Frege calls concepts (*Begriffe*) if one argument satisfies them, relations if two or more are required.¹¹ The function of one argument denoted by 'the mother of ξ ' has the value Eve for the argument Cain, also for the argument Abel; since Eve is not a truth-value, this function is neither a concept nor a relation. The function denoted by 'Eve is the mother of ξ ', which is a function of one argument and which has the value the True for the argument Cain, is a concept. The function denoted by ' ζ is the mother of ξ ', a function of two arguments, has the value the True for the respective arguments Eve and Cain. Whatever arguments one chooses, its value is either the True or the False; so it is a relation.

§11. *Ranges of functions.* The table of §6 listed ranges among the kinds of objects. The notion of range (*Wertverlauf*) is perhaps the obscurest of all Frege's basic notions; and yet it is important because it is his nearest approach to the modern notion of class. Frege himself gives three different inklings of what he means by it. The cause of its obscurity is the fact which he points out in *Grundgesetze* 1.7, §3, that what he primarily defines is not range but identity of ranges. He stipulates certain circumstances (*Grundgesetze* 1.VIIIb; 14 §9; 36 §20 *Grundgesetz* V; cf. 2.253 et seq., 'Nachwort') under which two expressions will be said to denote the same range. Now in *Grundgesetze* 1.16-8 §10, Frege shows at

¹⁰ This does not mean (cf. Church *Anticipation* 151d) that functions are not full-fledged entities; it is more or less what Aristotle and the scholastics mean in speaking of accidents as 'existing in another'.

¹¹ There are also functions whose arguments are truth-values; expressions denoting these are his counterparts of the so-called operators of statement-composition, or truth-functional operators. In his formal system, material implication and negation are primitive (undefined) functions whose arguments and whose values are truth-values, and disjunction, conjunction, etc. can be defined in terms of these (*Grundgesetze* 1.20-5). Furthermore, the word 'the' denotes a function (*Grundgesetze* 1.18-20); and quantifiers too he treats (*Grundgesetze* 1.36-9, especially 38^e) as denoting functions — namely, second-level functions (cf. fn. 12).

length that such a stipulation does not suffice to determine what kind of a thing a range is. He there investigates the possibility of identifying certain ranges with truth-values, shows that without violating his fundamental stipulation "it is always possible to identify any range one pleases with the True, and any range one pleases with the False" (17a8-5), and for reasons that are not clear immediately decides to do so. This is one of his three determinations or narrowings of the notion of range.

The second narrowing is that in some informal passages he identifies certain ranges with classes. Namely, he defines a concept as any function of one argument all of whose values are truth-values; and he (*Grundgesetze* 1.8 §3; cf. Xa2-3) calls the range of any concept a *scope* (*Begriffsumfang*). Then two later passages (*Grundgesetze* 2.159a, 253 et seq; cf. *Peano* 368b) identify scopes with what others have called classes. Thus the elucidation (Carnap *Meaning* 126-7, etc.) of scopes — and hence of all ranges — in terms of classes originates with Frege himself.

The third narrowing is given in a revealing passage in *Function* (8d-9; cf. *Grundgesetze* 1.5a7-3), where he draws an illustration from analytic geometry. Given a function of x , say a parabolic function, the range is the resulting curve; in this example, the parabola itself.

Now it is evident that in any case Frege's notion of range is more comprehensive than the modern notion of class, since not all ranges but only scopes are identified by Frege with classes. But the third inkling shows us that even this identification is misleading. Frege may say (*Grundgesetze* 2.158-9) "We will, for brevity's sake, say 'class' instead of 'scope of a concept'"; and he may identify 'class' in this stipulated sense with 'class' as understood by Russell and others; but it does not follow that what Frege means by scope is virtually what we today, following Russell, mean by 'class'. And what the comparison with a geometric curve reveals is that Frege means, rather, something more like what we today would call a relation. The function x^2 determines a curve; now analytic geometry teaches us to think of each point on the curve as an ordered

pair or couple of numbers. The curve itself could be identified with the class of all and only these ordered pairs. And consequently the modern conception of a dyadic relation taken extensionally, as a class of ordered pairs, permits us to think of the curve defined by the function x^2 as a dyadic relation. The curve defined by x^3 is a different dyadic relation. A function of two variables such as $x^2 + xy + y^2$ has a range that is a triadic relation; and so on.

Now let us consider a function that is a concept. $x^2 = 4$ is such a function. Its range correlates the possible arguments of this function with the respective values. For the argument -2 , the value is the True; for the argument 0 it is the False (i.e. ' $0^2 = 4$ ' denotes the False); for $+2$, the True; for $+3$, the False; and so on. The range of this function consists of an infinite number of ordered pairs, the first member of each pair being any entity (not necessarily a number; cf. §20) and the second member being either the True or the False. Moreover, there are precisely two ordered pairs whose second member is the True: (i) $[-2; \text{the True}]$ and (ii) $[+2; \text{the True}]$.

Now contrast this with a class in the modern (Russellian) sense. The function $x^2 = 4$ determines the class $x(x^2 = 4)$; and this class contains not an infinite number of members but just two: -2 and $+2$. Neither of these is an ordered pair. So the scope of the function $x^2 = 4$ is very different from the class determined by it.

Nevertheless, this class and the corresponding scope have certain properties in common; that is why Frege could interpret Russell's 'class' as his 'scope'. For instance, classes are identical if and only if the corresponding scopes are identical.

Accordingly, we may reduce Frege's three different determinations to two. His identification of scopes with classes need not be taken literally; it was merely feasible insofar as scopes and classes formally resemble each other. And even the remaining two determinations or narrowings may not be incompatible. Frege never defines 'the True' and 'the False' but once (*Sinn* 34a; cf. §18), and then ambiguously; so even though some ranges are truth-values, still all ranges may be classes of ordered pairs or trios or n -ads, i.e. relations taken in extension.

The latter, then, is apparently Frege's fundamental conception of range.

§12. *Function and object.* We turn now to the contrast between functions and objects. In spite of the current interest in Frege, this his basic distinction has received scant attention, the reason being that it is not so directly relevant as the notions of sense, denotation, proposition, and truth-value to the semantic problems with which discussions of Frege have been most concerned. In expounding the distinction it seems advisable to follow Frege's own procedure in *Begriff*: viz. to begin by explaining the distinction between concept and object, and then show how what is true of concepts is true of all functions.

Roughly, in any true or false sentence (as opposed to a declarative sentence that is neither — cf. §18) that can be divided into a subject and a predicate, the subject denotes an object and the predicate denotes a concept. If a division is made in such a way as to yield two or more subjects, what remains denotes a relation. Frege neither affirms nor denies the existence of relations requiring three or more arguments, but the only relations he has occasion to discuss require two arguments only. Relations and concepts both differ from objects in being unsatisfied (cf. §10); but (*Grundgesetze* 1.37^{a4}-^{ba}) relations are as fundamentally different from concepts as concepts from objects.

According to Frege's conception, it is in the very essence of concepts that they cannot be objects.¹² This is seen most compellingly by trying to treat them as objects. What happens is that one gets an object, all right, but it is no longer the concept that one was originally trying to objectify. For instance, in 'Cæsar conquered Gaul', 'Cæsar' denotes an object and

¹² There are, nevertheless, functions of functions (*Grundgesetze* 1.36-42 §§21-5); but (37^{a8}-10) these second-level functions treat first-level functions as functions, not as objects. As Russell puts it (*PM* 1.xivf, xxixb, 659-66), first-level functions appear in second-level functions only through their values. *Grundgesetze* 1.41^ac, 41^bb admit third-level functions.

Geach *Subject* has recently revived and defended Frege's distinction between concept and object.

'conquered Gaul' denotes a concept. Suppose we treat this concept as an object; grammatically, this involves treating its name as a grammatical subject. But to say, 'Conquered Gaul is a concept' is simply ungrammatical, while to say 'The concept of conquering Gaul is a concept' is grammatical but false. This is a surprising result, because at first sight one would think that 'The concept of conquering Gaul is a concept' is not merely true but truistic, even trivial. What Frege's doctrine amounts to is that 'conquered Gaul' and 'the concept of conquering Gaul' do not denote the same entity, and so are not mere grammatical variants of each other; and that furthermore it is the former expression and not the latter that denotes a concept. The radical difference in the grammar of the true expressions betokens an equally radical difference between the entities that they respectively denote. No sentence of the form 'x is a concept' is true; in Frege's terminology, the function, ξ is a concept, has the False as its sole value.

What then does 'the concept of conquering Gaul' denote? An object of a special kind; since Frege has no name for such objects, although he recognizes their existence (*Begriff* 201a), I shall call them concept-correlates. They are a species of what may be called *function-correlates*.

§13. *Kinds of objects*. No function is an object, then, and (*Function* 18b) an object may be defined as whatever is not a function. Since Frege uses no term to apply to whatever is either a function or an object, I shall introduce the term 'entity'. Frege nowhere gives a classification of objects;¹³ in the table of §6 I have drawn up an inventory of the kinds of entities that he specifically calls objects. The first part of this list comprehends truth-values (*Function* 18c); ranges (*Function* 19a); function-correlates (*Begriff* 201a); places, moments, and time-spans (*Sinn* 42b); ideas (no specific reference, but it is evident that this is where they belong); and of course in addition many other kinds that he has no occasion to discuss, or at least not to categorize.

§14. *Sense and denotation*. To explain the second part

¹³ Except that *Gedanke* 69c-d posits, in addition to ideas and to things of the external world, a third realm, to which propositions belong.

of the list it is necessary to turn to Frege's now famous distinction between sense and denotation. (*Sinn* gives the fullest exposition; cf. also *Peano* 368c-70a. See also §27 on the rationale of the distinction.) In the doctrine of sense and denotation, both ontology and semantics are involved.

Frege's distinction between the sense of an expression and its denotation is quite like the familiar distinction between connotation or intension and denotation or extension. Common-sense realism leads one to distinguish expressions from their meanings. But the meaning of an expression cannot be simply identified with its denotation, for we can find pairs of expressions that have the same denotation and yet somehow differ in meaning. There are at least two further factors to be considered. First, there are the private and variable meanings that an individual user of an expression attaches to it; Frege technically calls these ideas (*Vorstellungen*), and points out that by their very privacy they are irrelevant for logic and science. Second, there are standard, objective meanings: senses (*Sinne*), publicly knowable and such that two expressions may coincide in denotation and yet differ in sense. The expressions 'the morning star' and 'the evening star', though in point of fact they denote the same entity, obviously differ somehow in meaning; and since the meaning-difference is presumably objective, at least in part, it is to that extent a difference in sense and not merely in idea.

To say that an expression has a sense is only to say it has a meaning that is (a) objective, like the denotation, yet (b) distinct from the denotation. Frege imposes the following further conditions on sense: (i) he ascribes a sense to expressions which would not, according to Mill, have connotation; i.e. 'sense' is broader in extension than 'connotation'; (ii) he posits that every expression having a denotation has a sense (but not conversely); (iii) he posits that if two expressions have the same sense they have the same denotation, but that there are pairs of expressions identical in denotation but differing in sense; (iv) he apparently assumes that there are pairs of expressions, such as '5' and ' $2 + 3$ ', differing in sense even though the identity-statement joining the two expres-

sions (e.g. ' $5 = 2 + 3$ ') is necessarily true. All of these conditions together may be thought of as an 'implicit definition', or 'definition by postulation', of the term 'sense'. But they do not suffice to justify one in speaking of the sense of an expression. Frege's conception of sense is a generic, determinable conception, and its power in dealing with present-day problems is largely due to the fact that, given the problem, one can add further assumptions — sometimes ad hoc — that determine a more specific conception.¹⁴

As for Frege's conception of denotation, its chief peculiarity is his assumption that no expression denotes more than one entity. (Cf. §16.) The denotation-relation that he is talking about is simply a different relation from the relation — commonly called 'denotation' — that obtains, for instance, between the word 'horse' and each horse that has existed or will exist.

§15. *Ordinary senses and ordinary denotations.* Entities are of two kinds, that are most directly distinguishable by their semantical properties. In Frege's semantical system, every expression that has a denotation has a sense; and some expressions that do not have a denotation have a sense. Moreover,

¹⁴ Cf. fn. 8. Some people have proposed to recognize a kind of meaning such that no two expressions have the same meaning (e.g. Goodman *Likeness* 6d). Apparently Frege does not intend to impose so strict a requirement on his 'sense'. There are a number of passages in his writings where he expressly or implicitly ascribes the same sense to two different expressions, belonging to the same or different languages: *Function* 11a, *Sinn* 27d, 39f (cf. 42a3-1, 42b5-1). *Begriff* 196 fn. 1 points out that if no two expressions had the same sense, "every definition would have to be rejected as false"; and 199b states that "different sentences can express the same proposition" (and propositions are a species of senses). Similarly, Church *Formulation* permits different expressions to have the same sense, under certain circumstances. See also Church *Introduction* 19b.

On the other hand, there are pairs of expressions logically equivalent to each other, and yet to which Frege ascribes different senses; e.g. left and right members of true mathematical equations. And *Verneinung* 157 bottom seems to ascribe different senses to any sentence and the negation of its negation.

For Church's discussion of the sense-denotation distinction in general, see all of his items cited in the bibliography, and especially *Introduction* fn. 14.

every expression which when used ordinarily (*gewöhnlich*) in direct discourse has a sense (whether or not it also has a denotation), may be used in two other ways, in each of which it has both a sense and a denotation (*Sinn* 28b-c, 36b4-1): as a name of itself when used in the first way, and as a name of the sense it has when used in the first way. The second use we may call the autonymous use (cf. Carnap *Syntax* 17, 156), and the third use Frege calls indirect use — because, on his view, it is the way in which expressions are used in indirect discourse. To put the matter symbolically and more clearly: Let E be an expression which when used ordinarily has sense S and perhaps also denotation D. The denotation of E when used autonymously is E as used ordinarily, and the denotation of E when used indirectly is S. What the respective senses are, or how they may be identified (since in general specifying the denotation of an expression does not thereby specify its sense), Frege does not say.

Let us define an ordinary sense (relative to a given language) as any entity that is the sense of some expression (of that language) in its ordinary use; and an ordinary denotation as an entity that is the denotation of some expression in its ordinary use. Then it is a fact of Frege's ontology — never pointed out by himself — that the classes of ordinary senses and ordinary denotations are mutually exclusive; and furthermore, that all functions, if signified at all in a language, are ordinary denotations, not ordinary senses. For this reason it is needful to introduce the sense-denotation dichotomy only within the class of objects, not within the class of functions.

§16. *Is the sense-denotation distinction ontological?* This fact poses a speculative question. Could there be expressions, either incorporated in new languages or instituted in already existing natural or artificial languages, such that they would have ordinary denotations as their senses? For instance, could there be an expression whose sense would be a truth-value?

So far as I can see, there is no reason in Frege's system why there could not be such expressions, even if Frege himself never has occasion to take cognizance of them. But they would

all have a certain property in common, which is the reason why they would never find a use in Frege's system; namely that they all necessarily lack a denotation.

To explain the point of the word 'necessarily' here, it is necessary to discuss a relation that is never mentioned by Frege and cannot properly be said to be part of his explicitly developed system. And yet its introduction seems to be an extrapolation that is entirely in harmony with his system. I will call it the *correspondence-relation*. Frege assumes the principle¹⁵ that every expression with one sense has at most one denotation, and apparently regards this principle not as a convention but as a fact about the nature of senses. In consequence, it will be legitimate to speak in terms of a direct correspondence between a sense and its correspondent denotation, to which relation mediation via an expression that 'has' the sense and the denotation is inessential. To each sense, then, there corresponds at most one denotation; on the other hand, one denotation may correspond to more than one sense.

On the basis of the correspondence-relation senses may be classified into four kinds: (1) those that necessarily (essentially, inherently) lack a correspondent; (2) those that accidentally (i.e. as a sheer matter of fact) lack one; (3) those that accidentally have one; and (4) those that necessarily have one. Fictional names (e.g., 'Ulysses') are of kind (2); cf. also *Gedanke* 68b.

Although this fourfold classification is not Frege's, it seems to me to be virtually utilized by him. (And I further ascribe to him the epistemological view that we know immediately (intuitively, innately, a priori, by inspection of meanings) to which of the four kinds any particular sense belongs.) Let us call expressions whose senses are of kind (2), (3) or (4) *eligibles*, meaning that these expressions are eligible to have a denotation even if they do not have one; in parallel manner, expressions of kind (1) may be called *ineligibles*. Then one requirement that Frege imposes (e.g. *Grundgesetze* 1.45 §28) upon a properly constructed language is that all eligible expressions shall have ordinary senses of kind (4).

¹⁵ "The principle of univocality" (Carnap *Meaning* 98). Cf. Church *Introduction* fn. 6.

Now, to return to the speculative question with which this section began, we may say very compactly: there could be expressions whose senses are ordinary denotations, but they would all be ineligible.¹⁶

Thus the sense-denotation distinction is not *merely* semantical; it is ontological as well. Whatever is a sense of some expressions, is also a denotation of some (possible) expression; but there are denotations which, if treated as senses, have no correspondent denotation.¹⁷

§17. *Senses and denotations of complex expressions.* Frege assumes four semantical principles about complex expressions:

¹⁶ Carnap *Meaning* 130 has pointed out — and Frege would accept the conclusion, I do not doubt — that from every ordinary sense there issues an infinite series of indirect senses. (Unlike Carnap, he would not regard this consequence as militating against his system.) The fact that ordinary senses have no correspondents means that these series of senses are not infinite in both directions; they have no end, but they have a beginning.

¹⁷ Even so, one might think to banish the distinction *from semantics*, by showing it to be superfluous. The attempt might take these lines: whatever is a sense is also a denotation (of some expression or other); hence denoting can be taken as fundamental, and the relation of a term to its sense can be defined in terms of denoting. But the attempt would fail, for two reasons:

(1) Let *S* be the sense of expression *E*; then *S* is distinct from the denotation *D* of *E* if *E* has a denotation. And *S* will be the denotation of some term *F* — *F* being either *E* itself, used indirectly, or some other expression. But *F* will have *its* sense *T*; and *T* must be distinct from *S*, for if they were the same, their correspondent denotations *S* and *D* would be the same. Thus a vicious infinite regress begins; the sense of *E* has been defined, but not all senses. At every step in the recursive definition of 'sense', there will remain senses that have not been dealt with.

(2) How would we define the sense of *E*? By finding a term *F* whose denotation is the sense of *E*; but how could we find and specify such an *F*? The most obvious way would be by means of the correspondence-relation: the denotation of *E* is the correspondent of the denotation of *F*. But apart from difficulties when *E* has no denotation, admission of the correspondence-relation is tantamount to giving up denotation as the sole undefined semantical relation.

The above remarks do not show that semantics cannot get along with denotation as its sole undefined relation, but only that sense cannot be reduced to denotation in any way here envisioned.

(Ia and Ib) A grammatically permitted complex expression has a $\left\{ \begin{array}{l} \text{a. sense} \\ \text{b. denotation} \end{array} \right\}$ if and only if there is at least one way of dividing it into component expressions each of which has a $\left\{ \begin{array}{l} \text{a. sense} \\ \text{b. denotation} \end{array} \right\}$; ¹⁸ for example, into a function-expression and an appropriate number of argument-expressions (cf. *Sinn* 32b-3b).

(IIa and IIB) If two complex expressions A and B differ only in that in a place where A has component expression E, B has component expression F, and E and F have the same $\left\{ \begin{array}{l} \text{a. sense} \\ \text{b. denotation} \end{array} \right\}$, then A and B have the same $\left\{ \begin{array}{l} \text{a. sense} \\ \text{b. denotation} \end{array} \right\}$ or else both lack a $\left\{ \begin{array}{l} \text{a. sense} \\ \text{b. denotation} \end{array} \right\}$.

Principles (Ia) and (Ib) speak of there being 'at least one way' of dividing complex expressions. As noted in §8, there is in general more than one way.

Frege comes closest to a general and explicit statement of these principles in *Peano* 369-70.

§18. *Senses and denotations of sentences.* Frege treats sentences as complex expressions that conform to the above four principles. The sense of a sentence he calls its proposition (*Gedanke*); the denotation, if any, its truth-value. *Sinn* gives his fullest justification of this analysis. Frege treats sentences not only as expressions but as eligibles; accordingly, those of them that are analyzable into component eligibles all of which denote must themselves denote, by (Ib); and with the premiss available that a sentence denotes if and only if it is either true or false, the proof that all true sentences have the same denotation and all false sentences have the same denotation follows readily from (IIB). The object denoted by all true sentences Frege calls the True (*das Wahre*), and the one denoted by all false sentences he calls the False (*das Falsche*) (*Function* 13a, *Sinn* 34a, et alibi).

Not every indicative sentence denotes; for instance, the sentences of poetry and fiction do not. Such sentences are

¹⁸ It is not clear whether Frege would assume that, if a complex expression has a sense, every possible way of dividing it yields components each of which has a sense.

neither true nor false (*Sinn* 33; note how I. A. Richards's account of poetic statements is anticipated); they are, however, still eligibles. E.g. (*Sinn* 32b), 'Ulysses was set ashore at Ithaca while in deep sleep' is neither true nor false — lacks a denotation — if, as is probably the case, 'Ulysses' lacks a denotation. (It is assumed that there is no other way of dividing this sentence such that each component expression has a denotation.)

§19. *A later modification.* On one minor point *Gedanke* and *Verneinung* modify Frege's earlier ontology. In *Sinn* 39c he ascribes to imperative and interrogative sentences senses that are not propositions, i.e. that are not the senses of any indicative sentences, but are like them. Moreover he analyzes an indicative sentence, standing by itself and asserted to be true, as containing in effect two parts: an expression signifying a content (*Inhalt*), and an expression signifying¹⁹ assertion (*Behauptung*) of this content. Correspondingly, a judgment consists of an act of asserting a content. The content consists in turn of a proposition and a truth-value (*Grundgesetze* 1. X a). In his own symbolic language, he takes care (*Grundgesetze* 1.9) to make every asserted sentence consist of two parts: an assertion sign, and an expression expressing a proposition and denoting a truth-value. When Frege speaks of the sense of an indicative sentence, he must mean the sense of an unasserted sentence; otherwise the sense of an indicative sentence could not be simply a proposition, but would have to also involve the sense of the assertion sign (if it has a sense — see fn 19). The innovation of *Gedanke* and *Verneinung* is (e.g. *Verneinung* 145a) to identify the sense of a question²⁰ with the sense of its indicative counterpart; e.g. of 'Is 2 the only even prime number?' with that of '2 is the only even prime number'. Presumably, then — Frege does not quite crystallize his doctrine — interrogative and imperative sentences differ from indicatives only in virtually containing

¹⁹ I use 'signify' to be ambiguous as between 'express', 'denote', and some other kind of meaning that Frege does not analyze.

²⁰ Frege only deals with questions that can be answered 'yes' or 'no', not with so-called complement-questions like 'What time is it?', that contain interrogative pronouns.

an interrogation-sign or an imperation-sign in place of the assertion-sign.²¹ If this is Frege's analysis, it is substantially similar to such present-day analyses of verbal moods as Beardsley's (*Imperative*), Lewis's (*Analysis*), etc.

§20. *Fundamental similarity of all objects.* To conclude this exposition, we return to our starting-point: the distinction between functions and objects. There is evidence that Frege regards all objects as being more like each other than like any function; namely, a requirement that he imposes on every properly constructed language. The requirement is (*Peano* 374a16-5a) that if a certain function admits some object as its argument, (i.e. has a value for that argument), then it must admit every object as an argument.²² The requirement departs from mathematical practice, where it is quite usual to limit the arguments of such a function as ξ^2 to numbers. Frege requires that if ξ^2 takes some object, e.g. the number 3, as an argument — for which it has the value 9 —, then any object must be a fit argument for it. Frege's example is the sun; letting 'SUN' denote the sun, then 'SUN²' must also denote, and hence, of course, have a sense. That is, ξ^2 must have a value for the argument SUN. What this value shall be, is unimportant; we can pick arbitrarily on any object and assign that as its value.

This requirement is a formation-rule of any properly constructed language, according to Frege.²³ And he is careful

²¹ It is this definitive, through very late doctrine, that is expounded in § 18.

²² And must not admit functions as arguments.

²³ There are two senses of 'meaningless' in which Frege would describe certain expressions as meaningless: (1) Any expression E is meaningless, if it violates the grammatical rules (formation-rules) of the language to which it belongs, otherwise meaningful; (2) A sentence S which is meaningful, and which has a sense, is meaningless, if it lacks a denotation, i.e. if it is neither true nor false; otherwise it is meaningful. Frege virtually assumes that any expression of any language that is meaningful has a sense. And he requires of any properly constructed language (PCL) that every expression in it which has a sense have a denotation if its nature permits it to do so; in other words, that every eligible expression have a denotation. Furthermore, it is clear, though not pointed out by Frege, that every meaningful sentence in any PCL is meaningful; this could be shown by canvassing the possible varieties of meaningful sentences in

to make all the functions that he himself introduces conform to it. It may seem needlessly and complicatingly general when he (*Grundgesetze* 1.9 §5) introduces $_\xi$, a function with one argument whose value is the True when the argument is the True, and the False when the argument is anything other than the True;²⁴ it seems odd to have a function such that $__2 = 4$ is the False but also such that $__2$ is the False; but on Frege's view it is perfectly rational, because both $2 = 4$ and 2 are objects.

§21. *Variables.* A last remark about Frege's ontology. In analyzing the notions of function, argument, range, and value, one must naturally also analyze the notion of variable. Frege's analysis disproves the charge (cf Part III, §23) that his abstract entities are inferred by mechanically projecting the structure of language onto the world. Frege does indeed hold that function-expressions denote functions, argument-expressions denote objects, and value-expressions denote objects; but he draws the line at variables. Variables, he says, must be construed as expressions, not as denotations. Variable-expressions do not, contrary to the prevailing account of them,

any PCL, bearing in mind Assumption (Ib) and the requirement that every eligible expression have a denotation. And the converse, that every meaningless₁ sentence is meaningless₂, is obvious.

Consequently, Carnap's historical statement (*Syntax* 138b) that "...It was Russell who first introduced the triple classification into true, false, and meaningful expressions..." had better be amplified so as not to be misleading. Frege introduced the trichotomy both in precept (though not so forcefully as Russell) and in practice; only (i) he did not exploit its philosophical possibilities as Russell and his successors did, and (ii) he did not impose *sufficiently strict* formation-rules to render meaningless₁ the sentences that give rise to the logical antinomies.

²⁴ Had Frege introduced 'the True' (which let us abbreviate 'T') into his formal system, he could have defined the function $_\xi$ as $\xi = T$. The fact that the former function is taken as primitive shows that the only context in which Frege would use 'T' in his formal system is in identity-statements. And he has no use for 'the False' in his formal system at all. The expression 'the False' could not be defined in Frege's system either in terms of ' $_\xi$ ' or in terms of 'T', because of peculiarities in his way of introducing negation. It is easy in his formal system to build expressions denoting the False, either in terms of 'T' or of ' $_\xi$ ', but none of them would have the same sense as 'the False'.

denote variable entities. They do not denote anything at all.²⁵ And his reason for this view (*Was* 659b6) is an ontological principle: every entity is determinate.

III

STRANGENESS OF FREGE'S ONTOLOGY

§22. *Strangeness recognized by Frege.* Most people acquainted with Frege's ontology feel that it goes against the grain. Frege is perfectly well acquainted with the feeling; concerning his entire system he remarks (*Grundgesetze* 1.XIa), "I myself can in some measure estimate the resistance that my innovations will encounter, because I too had to overcome similar resistance in me in order to make them. For it is not haphazardly and out of a quest for novelty, but under constraint from the very subject that I have arrived at them." He is particularly aware (*Sinn* 34^a, *Grundgesetze* 1.Xa 9-8, *Peano* 368c) that his assumption of truth-values, and his view that all true sentences denote the same entity, seems odd. And speaking of his definitions, he says (*Grundlagen* XIa), "I advise those who would regard my definitions, say, as unnatural, to reflect that the question here is not whether they are natural but whether they get at the heart of the matter and are logically unobjectionable."

So Frege claims that more compelling advantages of his system outweigh its strangeness. It will be clarifying if, before investigating this claim in Parts IV and V, we analyze as penetratingly as we can the features causing the appearance of strangeness.

§23. *Parsimony.* Many philosophers today would spontaneously object on the ground of parsimony. Frege sets up his ontology to make logic and mathematics intelligible; these philosophers would maintain that he has posited more entities than is necessary for that purpose. (Of course, Frege has the ready answer that he has been at pains *not* to infer any superfluous entities; but see §28.) A variant of this criticism is the

²⁵ The details of Frege's account do not concern us here, but he analyzes quantification in terms of second-level functions rather than of objects. Cf. fn. 11.

objection that all Frege's beings are mere projections of language, "phantoms due to the refractive power of the linguistic medium" (Ogden and Richards, *Meaning* 96b).

But the maxim of parsimony is formal; it counsels elimination of superfluous entities, but indicates no way of determining which entities are superfluous. And on the other hand, Frege himself accepts a version of the maxim (see §28), as *Verneinung* 149-50 explicitly states. Consequently the issue between him and his objectors cannot be described as the issue of whether or not to conform to the maxim, but must rather be analyzed as the issue of whether or not certain particular assertions, asserting the existence of certain entities, *do* conform to the maxim.

Now it is generally agreed that no existence-statement based solely upon observation of the datum is to be ruled out by Ockham's Razor; so that conceivably one issue between Frege and opposing ontologists would be, whether the abstract entities whose existence he asserts are directly given or not. I suppose Frege would say that some of them, finite numbers for instance and at least some propositions, are directly given, but that the existence of others, e.g. truth-values, is inferred.

§24. *Some other objections.* I suspect that the basic commonsensical objection to Frege's ontological system, the inarticulate but firm objection that we feel whether or not we are in a position to defend it, is the conviction that there just *aren't* all these odd, queer, obscure entities that Frege invents. A similar objection might be urged by various realistic positions, that are willing to grant some abstract entities but would balk at truth-values, function-correlates, and so on.

Now all of the objections so far mentioned consist of denying some of Frege's existence-statements; e.g. they assert 'there are no abstract entities' or 'there are no truth-values' or 'there is no denotation of the negation-sign'. To that extent the strangeness of Frege's system consists in making such and such existence-assertions, and objections consist in denying these assertions.²⁶ But not all objections can be cast in this

²⁶ Dialectical difficulties about such denials have recently been discussed by Quine *On what*.

form; not the nominalistic objection, for example. Frege says that proper names, descriptive phrases, numerals and so on denote; and he also says that true and false sentences denote. Now one might in the first place deny that there is any such denotation-relation comprehending among its referents both numerals and sentences, and *this* denial would be the denial of an existence-statement. But a nominalist could not use this way of putting his objection, because it would not cut sufficiently deep. He would have sweepingly denied all relations anyway, even, for instance, a denotation-relation between numerals and numbers. To express in his own terms the objection I am imagining, the nominalist would have to say something like this: It is incorrect, or misleading, or not ultimately satisfactory, to build a language in which one and the same verb is used to fill the blank in (i) 'Sentences—truth-values' and (ii) 'Numerals—numbers', if both the resulting statements are to be asserted as true.

IV

RATIONALE OF FREGE'S ONTOLOGY

§25. *Frege's method of argumentation.* Frege doesn't merely present his system; he argues it. In the following exposition it will be possible to go somewhat further than he does in formulating, assembling, and systematizing his basic arguments.

His basic method of argumentation is akin to the Kantian: taking certain beliefs for granted, he inquires into the conditions of their possibility, i.e. into their presuppositions. What he takes for granted is a commonsensical realism: a belief (a) that there is an objective reality which is independent of but accessible to human knowledge; (b) that though human error is abundant, we do in fact already possess much genuine knowledge of this reality, including the standard parts of mathematics; (c) that all knowledge is a cognition of timeless, objective truths; and (d) that not only the natural sciences but logic and mathematics have objective truths as their subject-matter.

Frege's method of inferring presuppositions, rather like the scientific method of verifying a hypothesis,²⁷ consists of two parts: (1) devising a view that accounts for the assumed beliefs; (2) showing that no other possible view accounts for them. In science it is never possible to do the second task conclusively, because there is no effective way of reviewing all possible theories. In Part V we shall see that Frege's execution of the second task must be similarly inconclusive, for similar reasons. Here in Part IV our concern is with the first task. I will first briefly state the rationale of Frege's entire ontological system, and then discuss some of the details at greater length.

§26. *The overall picture.* In fixing the basic concepts of his system, Frege uses the method of mathematical generalization (cf. §9). Since he aims to deal with the notions of mathematics, he would in any case have to give an account of the notions of function, argument, and value. His thought runs along these lines:

(A) Frege's realism (which involves a rejection both of psychologistic and of formalistic theories of mathematics) leads him to make a sharp distinction between expressions and what they denote.²⁸ Applying this distinction to mathematical notions, he infers that function-expressions denote functions, just as argument-expressions denote arguments. Mathematically generalizing the notions of function (realistically interpreted), argument, value, and range — this latter notion itself generalized from the notion of a curve in analytic geometry —, he finds that the notion of function can encompass the logical notions of concept and relation, *if* these be thought of as functions whose values are truth-values. The notion of function cannot, however, be generalized to include arguments,²⁹ values, and ranges, the very grammar of the expressions denoting these showing them to be radically different from functions.

²⁷ In *Sinn*, the comparison is explicit; e.g. 35b end.

²⁸ E.g. *Function* 3; *Grundgesetze* 1.IXb, XIIIb, 4; *Was* 662-3. See further Carnap *Syntax* 156-60 and Quine *Mathematical Logic* 23-6. For a few examples of philosophical errors resulting from failure to draw the distinction clearly, see Quine *Whitehead* and Church *Review* C 302d.

²⁹ Except, of course, that functions of one level may be arguments of functions of a higher level.

(B) Frege arrives at the notion of truth-values from another direction also. Many mathematical statements are identities; if identity-statements assert identity of denotations, some other kind of meaning besides denotation must be reckoned with. In line with his realism, Frege distinguishes two kinds: a subjective kind (idea) and an objective kind (sense). Now sentences can be regarded as value-expressions, having both sense and denotation like other value-expressions; thus the notions of sense and denotation have been mathematically generalized, and have proved to solve other problems too, such as the analysis of indirect discourse.

(C) The doctrine that sentences have senses as well as denotations finds further corroboration from the realistic analysis of judgment (*Sinn* 34*, *Grundgesetze* 1.Xa, *Gedanke*) into (a) a human, private, transitory act of judging or asserting and (b) an objective, eternal content judged, which is, or includes, the sense and the denotation of some sentence. This analysis is corroborated in turn by the observation that to assert a content is not the only thing we can do with it; a content may, instead or as well, be questioned, (in special cases) commanded, or (as in antecedent and consequent of a conditional sentence) merely contemplated.

Now a few comments on sundry points in the preceding sketch.

§27. *Psychologism and formalism.* Frege defended his realism by incessant and elaborate polemicizing against psychologism and formalism, which — in his day at least — were its chief rivals in the philosophy of logic and mathematics. Psychologism says that what we are studying in logic and mathematics is ideas in our minds; formalism says that what we really study is the expressions themselves that we employ in the study.

Anti-formalism is the reason for Frege's distinction between expressions and what they denote. Common sense contrasts symbols with what they are about or what they mean; Frege makes the contrast more exact by distinguishing three kinds of meaning — two of them objective, one subjective. The common-sense notion of what a symbol is about amounts, so

far as it can be expressed in Frege's terms, to his notion of the denotation of an expression.

So far Frege's notion of sense follows pretty well along commonsensical paths. Now he mathematically generalizes the notions of sense and of denotation; in particular, he inquires whether they may not be applied to sentences as well as to other expressions. After an argument too complicated to expound here,³⁰ he concludes that all true sentences have the same denotation and all false sentences have the same denotation, which denotations he calls the True and the False, respectively. Sentences that are neither true nor false, such as those of fiction, have no denotation. Thus sentences resemble noun-expressions in that some have a denotation and some do not.

One of the strong recommendations of the sense-denotation distinction to Frege's mind is (*Grundgesetze* 1.Xa19-20) that it offers a ready explanation of indirect discourse. Since the phenomenon of indirect discourse falls under the purview of the semantics of natural languages, not of logic or mathematics, Frege's interest in it suggests that he intends to be outlining a semantical system that will be adequate to the former field as well as to the latter two. But I have no light to throw on either the reasons or the causes that directed Frege's concentrated attention to this particular phenomenon in the first place.

§28. *Parsimony again.* In Part III (§23) I mentioned objections to Frege's system on grounds of parsimony. The notion of parsimony or economy or simplicity is a complicated one, and to date nothing approaching a definitive analysis of it has been published. Nelson Goodman has made a notable contribution in three articles,³¹ in which one of the important points is that a system-builder may have to choose between different kinds of simplicity or parsimony that are incompatible with each other. Frege too is confronted with choices of this

³⁰ Church *Review C* gives a "reproduction in more exact form" of the argument (*Review C* 301b). Cf. §18.

³¹ *Simplicity, Logical Simplicity, and Improvement.* See *Wells Facts* for my viewpoint on the philosophical import of simplicity.

kind, though without stating the fact and quite possibly without realizing it.

The kind of parsimony Frege strives for is not parsimony of entities, nor even of kinds of entities, but parsimony of a kind that can be effected by mathematical generalization. Thus, he has no hesitation about inferring an infinity of senses of expressions;³² but, once having concluded the necessity of distinguishing sense from denotation, he tries to apply the distinction not only to 'terms' but also to sentences. Again, a certain economy³³ would be effected by treating functions extensionally; i.e. by assuming that if ϕ and ξ have the same range, $\phi = \xi$; but apparently he has no interest in such an economy. (That Frege is careless about laying down identity-conditions in general has been remarked in §8.) Is there not something in common between this indifference and his indifference to brevity or compactness of proofs (*Grundgesetze* 1.VIIa)? Similarly, although Frege thinks of definitions as abbreviations (*Grundgesetze* 1.VIb end), he does not seem especially eager to minimize the number of primitive signs in his system. (Cf. *Peano* 366a-7 on policies in definition.) On the other hand, one particular economy — reduction of numerical equality to identity — he treasures very highly (*Grundgesetze* 1.IXb). Yet another instance of Frege's parsimony is found in his discussion (*Verneinung*) of negation; he analyzes judging (*das Urteilen*) as the act of asserting a content (*Behauptung eines Inhalts*), and declines to posit a distinct, unanalyzable act of denying a content (*Verneinung eines Inhalts*) on the ground that in such a case we can equally well consider that the negation of the denied content is being asserted. This is an economy because negation of contents must be admitted even when there is no judging — for example, in the antecedent or consequent of a conditional sentence.

³² Nor would he demur at the infinite series of senses mentioned in fn. 16.

³³ Which however cannot be described as a reduction in the number of entities of a certain kind, in case the number both before and after reduction is infinity, and infinity of the same order.

V

THE FALLACY IN FREGE'S ARGUMENT

§29. *Adequacy and exclusive adequacy.* In §5 I mentioned a certain important fallacy in Frege's defense of his system. It is one thing to show that a system is adequate, another to demonstrate that it is exclusively adequate. For the latter demonstration involves showing that no other possible system (dealing with the same subject-matter) is adequate. Yet in *Grundgesetze* Frege seems to think that he has accomplished both demonstrations.

Now we know today that not even adequacy can be claimed for the system; that is, for his formal and informal logical-semantical-ontological system taken as a whole. (1) Its most conspicuous inadequacy is the fact pointed out by Russell in 1901, in a letter to Frege, viz. that it leads to logical antinomies; an inadequacy which Frege unsuccessfully³⁴ tries to surmount in *Grundgesetze* 2.253-65. But this inadequacy does not vitiate such basic conceptions as function, sense, truth-value, etc.; and Church (*Formulation*) sketches a rehabilitated version of Frege's system upon which a 'simple theory of types' is imposed. There are two other sorts of inadequacy that might be pressed. (2) The system is certainly incomplete; for instance, as we have seen (fn. 8), Frege does not lay down exhaustive conditions under which two expressions have the same sense, nor exhaustive conditions under which two function-expressions denote the same function. Frege might fairly describe inadequacies of this sort as matters of detail. (3) Basic philosophical objections to it might be raised. Some of these were mentioned in Part III. One might argue against Frege's 'Platonism' or extreme realism, for example.

However, the topic of the present Part V is not the adequacy of Frege's system but its exclusive adequacy. Of the two demonstrations that Frege seems to think he has accomplished, it is the second that will here be our concern. That

³⁴ Sobocinski *Antinomie* discusses Frege's attempt and Lesniewski's proof that it is unsuccessful. See *Frege Notes* 251 for philosophical discussion.

Frege has not demonstrated the exclusive adequacy of his system can be shown in two ways, negatively and positively; negatively by showing that his arguments are inconclusive, and positively by producing an alternative but equally adequate system. The negative approach is used in §30; in §31 a very small and fragmentary contribution of the positive or constructive variety is presented.

§30. *Frege's arguments for exclusive adequacy.* It is worthy of note that Frege devotes far more space to establishing the adequacy of his system than to establishing its exclusive adequacy. In behalf of the latter he offers three kinds of arguments: he (1) makes bare assertions of his claims, (2) criticizes sundry previously proposed views, and (3) challenges others to produce a better system.

Of (1), one can only remark (a) that Frege indulges in it quite often, and (b) that it has very little weight. It would be a mistake to set it aside as having no weight at all; it may be thought of as informing us that Frege, a man to whose meticulousness and subtlety we can testify on other grounds, is unable to envisage any system superior to the one with which he presents us.

Number (2) is the technique that occupies the most space in Frege's writings. *Grundlagen* is largely given over to it, as also the Foreword to volume 1 and Part III. 1 of volume 2 of *Grundgesetze*,³⁵ as well as most of his shorter writings. If thought of as an inductive method, it is excellent, and Frege handles it brilliantly; but if thought of as apodictic, it must fail unless it is somehow demonstrated that the theories refuted are all the possible alternatives to the theory being defended. Frege does not essay any such demonstration; he merely reviews the existing theories. And that is why he employs (3).

As for technique (3), he has shown his system to be the best of those in existence at the time of his writing, and the burden of proof properly passes to anyone who would maintain that a still better one can be worked out. There is of course a certain presumption that it will not be easy to devise

³⁵ §§55-164. §§86-137 are translated by Black *Formalists*. Cf. Linke *Frege*.

a better one. "It is radically improbable," he says (*Grundgesetze* 1.XXVI, speaking of Part II of that treatise), "that such a structure could be erected on an uncertain, defective basis. Indeed, whoever has different persuasions can try to erect a similar structure on them, and he will realize, I believe, that it cannot be done, or at least not so well. And I could acknowledge that I had been refuted only if someone showed concretely that a better, more tenable structure could be erected on different fundamental persuasions, or if some one showed me that my axioms led to obviously false theorems. But that no one will succeed in doing." (Russell disconfirmed this last prediction in 1901; cf. §29.)

Here Frege imposes unreasonably strong conditions on a refutation. Would it not be sufficient to produce an alternative system that is not 'better and more tenable' but merely *as good and as tenable*? And second, Frege apparently regards as insufficient any merely destructive criticism of his logical, semantical, and ontological foundations,³⁶ although as we have seen above in number (2), it is a kind of argument that he himself uses most liberally.

§31. *Sketch of a positive refutation.* To intimate that systems alternative to Frege's can be developed, I will very briefly sketch a tiny fragment of one such system. The fragment is obtained by elaborating on a passing remark of Quine's. In *Mathematical Logic* 32c Quine concludes that "it... seems well to adhere to the common-sense view that statements are not names at all," i.e. that sentences do not denote anything.

So Frege says that every sentence that is either true or false denotes a truth-value, whereas Quine favors the view that no sentence denotes anything at all. This sounds like a flat disagreement, a mutual contradiction. Yet it need not be so. Let us see whether we can take the view that both Frege and Quine are right. This could be, if they are talking about different things. (I do not commit myself as to whether

³⁶ Such as Russell's in *Principles* Appendix A, *On denoting*, and *Knowledge* 225 et seq. Frege is defended by Jones *Objections*, and by Church *Sense and Review* C 302d.

this is the *sole* condition under which both could be right.) Developing this supposition, let us call the denotation that Frege is talking about F-denotation, and the denotation that Quine is talking about Q-denotation. Then Frege says that every true or false sentence F-denotes a truth-value, and Quine says that no true or false sentence Q-denotes anything. So construed, the appearance of contradiction vanishes. Such a supposition does not definitively settle the question, for various objections might be raised against it. But at least one *prima facie* objection may be dismissed. Frege, it might be argued, would want to maintain not only that true sentences F-denote, but also that they Q-denote truth-values; while from the other side someone might contend that not only do sentences not Q-denote anything, they do not F-denote anything either. The reply to this argument is that since it is part of the very nature of Q-denotation that sentences do not belong to its domain of referents, it would be a self-contradiction to affirm that sentences Q-denote truth-values; and since it is included in the definition of F-denotation that, among the ordered couples that it relates there are couples $[x;y]$ such that x is a sentence and y is a truth-value, it would equally be a self-contradiction to say that no true or false sentence F-denotes anything. Thus, if those who speak in terms of F-denotation and those who talk of Q-denotation want to express their disagreement with each other, they must do so in some other way.

From this short illustration it may perhaps be discerned how a system very different from Frege's could be erected, namely the system of Quine's *Mathematical Logic*.³⁷ And with this insight the vista of an alluring line of inquiry opens up. Could it be that many of the apparent disagreements in philosophy and elsewhere are illusory, and can be dispelled, like the one between Frege and Quine, by proper analysis? Could they be transformed from disagreements into simple diversities? The thought is an ancient one, but it has certainly

³⁷ Logical antinomies have turned up in this system too, and have been corrected in subsequent reprintings; but they appear to have nothing to do with Frege's and Quine's diverse conceptions of denotation.

not yet been brought to its apotheosis. Could it be that Frege is right in what he affirms, wrong in what he denies; right in holding that we *may* regard sentences as denoting truth-values, wrong in holding that we *must* do so? If so, it may well turn out that his error, so far from being egregious (§5), will be one of the most common errors in philosophy.

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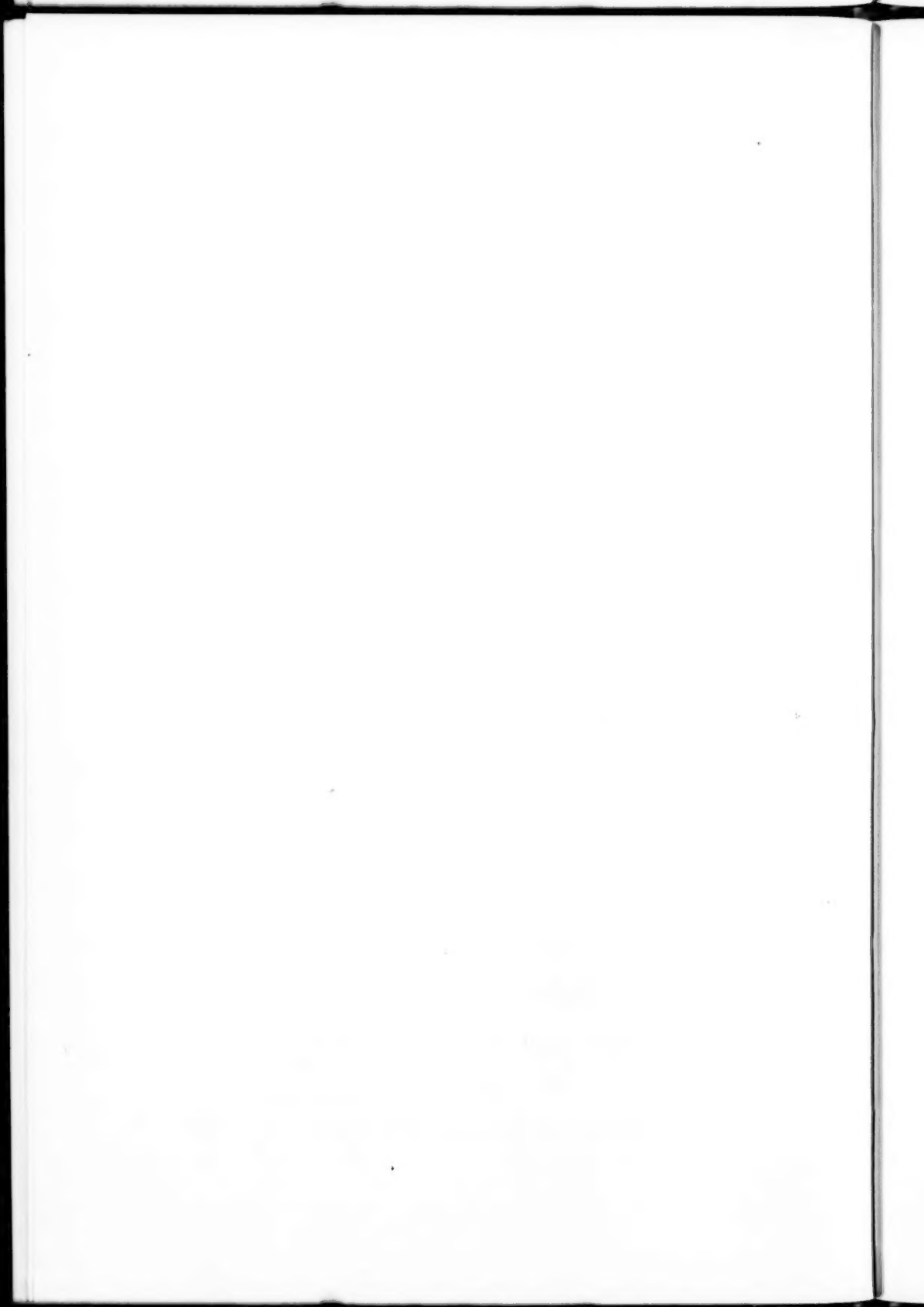
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THE GOOD LIFE *

**The Good Life*. By E. Jordan. The University of Chicago Press, 1949. vi, 453 pp. \$5.00.

Jordan's *The Good Life* is philosophy in the grand style and this means that the book is philosophical in method and outlook and contains no historical baggage. Whatever one may think of Jordan's views, only an extremely narrow thinker could fail to acknowledge that in this comprehensive treatment of moral issues there is to be found an instance of that constructive philosophy which, in these times, is so often lamented but so infrequently produced. *The Good Life* stands as a profound, thorough, and original treatment of issues which in the past have been clouded over and obscured by philosophers who have been more interested in promoting the success of their own particular *ism* than in facing the concrete situation in all its complexity and honestly reporting as much as is given them to see and to understand.¹

The Good Life is nevertheless a difficult and sometimes exasperating book. A careful reader will find himself put off again and again by the recognition that Jordan, for all of his ability to keep in touch with well-known facts, makes what is perhaps only a minimal attempt to communicate clearly and concisely what he has to say. It is not that the book is *confused* in the sense made so popular by positivism, but that Jordan is not one for *explaining* what he wants to convey; he leaves to the reader the task of working the matter out for himself, or if he does attempt to elucidate, the results are often as frightening as the following definition of an "experience": "a representation as an individuate instance of a fact that has worth or value, with the relation between fact and value made the basis of a reference to reality in perception" (78).

¹ Concerning the originality of Jordan's treatment, one may well agree with the remark of Negley in his discussion of Jordan's general philosophical position: "One might say that Jordan's statement of corporatism is unique in the philosophical speculation of the United States." *The Organization of Knowledge*, p. 302.

Jordan's language is often unduly involved and difficult to fathom, despite the gift which he undoubtedly has of exploiting the forgotten meanings of familiar words. It is this latter gift, however, which enables him to say a great deal that is original without introducing an entirely new language after the fashion of a Peirce or a Whitehead.

The Good Life, as the title implies, is a venture into moral philosophy or ethics, but the reader must be warned that Jordan's treatment has little in common either in approach or content with what currently passes for moral philosophy, and it is not too much to say that this is one of its chief merits. The work is systematic throughout and is thoroughly oriented toward the concrete situation. While it contains much criticism of certain well known philosophical positions, the book possesses no directly acknowledged orientation to school philosophy, although the author's philosophical standpoint shows itself clearly enough.² Jordan does not have a great deal to say about the pronouncement of other philosophers on ethics, either past or present; instead he deals with the subject matter directly and in this way makes a positive contribution to philosophical thought. For those who desire a landmark or landmarks in the history of philosophy by means of which to fix Jordan's position, it may be said that while his *corporatism*, as Negley has so aptly put it, cannot easily be fitted into the

² It is to be noted that the index contains only three proper names, Plato, Aristotle and Kant. Jordan is obviously indebted to the first two a great deal and even to Kant perhaps more than he is aware, although he rejects the Kantian subjectivism. The interesting list of philosophical works on pp. 445-6 comes closest to indicating directly the philosophers with whom Jordan is in agreement and those he rejects. This list might well be scanned by the reader in advance. After working through *The Good Life*, the basic distinction introduced in this *bibliography* seems intelligible enough, except for the curious placing of Bradley among those who represent "the last heroic effort of the subjectivist motive." In fact what Jordan says (62-3) about the point of view which he surely intends to have us take as that of Bradley (although he does not mention him by name and the possibility cannot be ruled out that he means to refer rather to Green) indicates that he has profoundly misunderstood the main drift of Bradley's ethics of self-realization. And, what is worse, Jordan is prevented, by his fear of subjectivism, from seeing that Bradley is indeed his ally in the struggle against individualism.

traditional categories defining philosophical types, it is most akin in its ethical implications to the thought of Plato and Aristotle, and, I would say, Hegel (although Hegel is never mentioned by name). No perceptive reader can fail to be impressed by the similarity between Jordan's doctrine of the corporate person as the bringing together of what he calls subjective and objective virtue into a living whole, and Hegel's idea of ethical life as the synthesis of individual and corporate spirit. Which similarity, of course, takes us right back to Plato and Aristotle for it was upon their views of the relation between ethics and politics that Hegel depended so largely in his *Philosophy of Right*.

Perhaps the most important consideration to be kept in mind in reading *The Good Life* is that Jordan is attempting a reconstruction of ethical theory; this means that, among other things, it will not do to set him down in the midst of current discussion and try to force him to take sides on the by now threadbare issues of contemporary *value* theory. He does not offer any extended discussion of such themes, for example, as the verifiability of moral judgments, or the meaningfulness of statements in ethics; instead he seeks to deal directly with the good life in its entire range and to set forth in considerable detail an ethical theory culminating in what is called the corporate person. Some may feel that such an approach is inadequate and even disrespectful to the extent to which it virtually ignores current philosophical discussion and controversy, but howsoever much one might wish to see Jordan treat more explicitly the subtle reasonings of those ethical theorists with whom he would certainly disagree, one cannot help acknowledging that it is good, both for cultural life in general and philosophy in particular, that Jordan gets down to business, so to speak, by writing philosophy instead of writing about philosophy and philosophers.

It will be well, since no review can deal with all the relevant questions, to indicate exactly what themes shall be considered and in what order. I shall discuss first Jordan's view of the nature of ethical theory and its foundation in the act; second, the critique of subjectivism, taken as the view that morality is either dependent on or identical with some

state of mind; third, Jordan's view of the corporate person as the good life, and the accompanying elucidation of what he calls the objective virtues, wisdom, courage, temperance and justice. Following this I shall call attention to two points in Jordan's theory which I take to be particularly open to adverse criticism: his underestimation of the subjective motive, which leads to a neglect of the inner life of the individual, and his view of the nature of religion.

For Jordan, ethics is to be conceived as both a theoretical and a practical discipline whose concrete content is morality. As theoretical it implies knowledge both of the world and man generally, and of the moral situation in particular; as practical it is concerned with action and, above all, with *control*. There is, in fact, nothing in Jordan's entire philosophy which plays a more significant role than the ideal of control, and howsoever much stress is placed on knowledge as a primary, indeed the primary, obligation, again and again it is the *motive to control* to which he returns.³ This is of the first importance for an understanding of his basic orientation; the good life on his view is not ultimately one of personal devotion or of loyalty to some over-arching ideal, but is rather the establishing of certain relations and the realizing of objective states of affairs through the exercise of human capacities always under the impetus to control. For all of his criticism of *modern* thought, Jordan's ethical theory shows that he himself is in agreement with the fundamental assumption of modern culture: *knowledge is power*.

Ethics is further characterized as being particularly concerned with "the total of the elementary forms of activity" (6) and in this respect Jordan regards it as the most fundamental of the practical disciplines and the one to which all others are subordinate. It is the task of ethical theory to give meaning to action, or rather, since this may imply that the meaning is not objective but supplied by the interpreting mind, to discover

³ See pp. 13, 41, 136. How fundamental this motive is for Jordan can be seen in the fact that he regards knowledge as *logical control* of nature and culture, while wisdom is taken as *practical control* of both. See esp. 14 and cf. 41 where the "concept of control" is said to be one of "the major categories of morality."

the meaning *within* action and to express it in intelligible form. Jordan makes a basic distinction between "natural" as "what man, his world, and their relations originally are" (4-5) and "cultural" as "man, his world and their relations after they have been modified by human action" (5). It is in the relation between the two that the meaning of action is to be found, and Jordan assigns to ethics the task of setting forth "the character and significance of the relation between nature and culture" (13). Although Jordan is careful to point out that consideration of the metaphysical implications here would take us beyond the scope of the book, he does seem to identify nature with existence and culture with meaning or value, thus giving some hint as to the metaphysical framework within which his ethical principles are to be interpreted.

Jordan's tendency to stress meaning in ethics rather than value, besides being of great importance in the analysis of action, has at least two advantages. First, it saves him from the difficulties faced by those who are trying to defend the reality of the *realm of values* over against what is supposed to be its destroyer, the *realm of fact*. Second, it enables him to start from the concrete fact that there are reasons for action, both proximate and ultimate, which reasons constitute the *meaning* of human action. Meaning, on this view, appears as a concrete factor in the total moral situation and, although Jordan's fear of subjectivism leads him on occasion to forget the comprehensive way in which he understands reality as embracing both subjective and objective poles (i.e. he sometimes writes as though the objective situation excludes mind or experience), he does explicitly recognize the presence of meaning as a factor which simply is and as such stands in need of no justification.

"Action," it is said, "is the universal moral phenomenon" (14) and when action is comprehended in all its complexity the task of ethics is completed, for action is its appropriate and complete subject matter. Ethical theory does not, so to speak, go behind action to any reality more simple or basic; rather, it begins with action and seeks to describe its structure and explain its meaning (see esp. 24). And it is important

to be clear about Jordan's view of what constitutes an explanation in ethical theory, even if his own account is not as clear as it might be. Ethics, according to him, cannot be content with descriptions as when it is said, for example, that such and such an act arose from certain motives, intentions, environmental circumstances, etc. and this is taken as a complete account of the act. What Jordan requires instead is explanation and this means stating "the significance of the fact explained" (15) which significance always has reference to moral principle. Description without reference to moral principle can never be a surrogate for explanation, nor can an account of the context of action suffice because Jordan maintains that "the meaning of a fact is not contained in the descriptions of its surrounding facts, nor of its relations to them" (15). Explanation of the act necessitates appeal to moral principle and this is found in certain universal characters of all acts.

In order to expand Jordan's idea of explanation it is necessary to distinguish between *action* and *movement* for it is only action properly so called which merits the attention of the ethical theorist and consequently calls for explanation.⁴ Movement means change as presented in objective situations and as such it legitimately involves the idea of cause. Action,

⁴ In many places throughout the book Jordan deals with the difference between action and movement, but his tendency to be oblique rather than direct in statement makes it difficult to be sure that the distinction between the two has been fully grasped. Certainly the clearest statement of the distinction is the following: "An act can only be distinguished from a movement by the presence in it of cognition" (114) and just because this is so definite one might be inclined to give to it more emphasis than that intended by the author. I suspect that Jordan does not put more stress on this particular difference between the two because he is so fearful of idealism (which in ethics always means for him that morality is some state of mind), and this in turn because he identifies the latter with subjectivism, as if he had forgotten his own doctrine that mind is one of the constituents in a wider situation which alone can be called objective. I should suppose that unless cognition were the decisive factor in the distinction, we could not legitimately be said to be talking about *human action* at all and hence not with anything which might be called morality. Furthermore, unless cognition is of the first importance here, Jordan's entire theory of *control* is nothing to the point.

on the other hand, is never presented but is rather inferred from what is presented (see esp. 24-5), and, in further distinction from movement, the act is said to be neither a caused event nor the cause of other events, although it "includes or implies causes in every case" (24). The reason Jordan denies that action in his sense is either caused or is itself a cause is that he is anxious to preclude the possibility of any simple *scientific* ethics based solely on the causal relationship. He rightly sees that in all ethics of this type human behavior is *explained* when causal relations are established and that is the end of the matter. Jordan on the contrary maintains that on such a basis action cannot be explained just because it is reduced to movement which itself has no moral character although it is present in situations which possess such a character. What is demanded instead is that action be explained by the delineation of its *meaning* through its end and its purpose which, on his view, are as much a part of the objective situation as anything else. Explanation, then, can be achieved only when the purpose and end of the act is set forth and related to moral principle.

It is interesting to note that it is precisely on the ground of his denial that action can be understood by reference to causality that Jordan refuses to admit the possibility of any *naturalistic* ethical theory. For naturalism,⁵ says Jordan, there can be no ethical system properly so called because on that view the person is regarded as a member of the species and as a causal agent serving to maintain the continuity of the species. Jordan believes that naturalism has dealt with many important aspects of the moral situation, but, he concludes, "naturalism stops just this side of the field where ethical principle normally holds" (32).

One of the singular features of Jordan's theory is the

⁵ Since "naturalism" as a philosophical position is not elaborated in detail by Jordan, nor are any representative thinkers mentioned, it is not clear exactly what school of thought he has in mind. He may be thinking of the tradition going back to the 19th century, but there is no indication that he means to include contemporary "neo-naturalism" which claims to have avoided at least some of the errors and to have given up some of the extreme doctrines of old-fashioned "materialistic" naturalism.

idea that there is continuity between fact and meaning because both are part of a total complex. We may start, he says, from the fact that "some things are preferred to others" (25) and from this fact draw the inference that "events in themselves have meaning" (25). From this it is said to follow that "we can pass from an act to its interpretation and remain on strictly objective ground all the way" (25). In view of the futility of much of the controversy, past and present, over the so-called subjectivity and objectivity of values, what Jordan proposes looks very fruitful indeed. Unfortunately he often fails to sustain his own insight because of his fear of subjectivism, the fear that meaning will be referred back solely to the intention or will of the individual and thus become a state of mind thereby losing its "objective" status. Why states of mind, on Jordan's own view, do not have objective status, is difficult to fathom.

Let us turn now to Jordan's criticism of subjectivism. Insofar as his positive reconstruction of ethical theory centering in what he calls the corporate person is intended as the proper corrective to the subjectivism of much previous ethics, an understanding of his position requires that we be clear on at least three heads: (a) What Jordan understands by subjectivism in ethical theory; (b) His view of factors determining the good, involving the relation between the person, the act and the world; and (c) The precise points at which subjectivism is inadequate as morality and erroneous as ethical theory. When this has been done it will be possible to set forth and consider Jordan's comprehensive view of the good life.

(a) Jordan calls all morality subjective which makes the good or indeed any of the moral categories dependent on the presence of some state of mind, or upon some simple quality supposedly characterizing the will of the individual. And it is obvious that by 'subjective' in this context Jordan understands the *privacy* of the individual feelings, ideas, intentions, motives, etc. which have played so large a part in certain traditional types of ethical theory. All attempts to explain action and find the locus of morality in an exclusive reference back to contents of consciousness present in the individual taken as a unique instigator of events are looked upon by Jordan as instances of subjectivism in ethical theory. One of the central

theses of Jordan's entire analysis, however difficult it may be to keep it in sight while attempting to follow his argument to the end, is that action is to be interpreted by reference to the total context in which it occurs, a context of which the individual person is only a small part, and, as it would appear, not a very significant part. As we shall see, Jordan finds the genuinely moral in what is called a *cosmic relation* between the act taken as a public, objective fact, and the web of relations constituting the context or "world" within which it occurs (39; cf. 16). And, it may be added, it is just this cosmic relation which is at the core of his *objective* morality.

Jordan is thus attacking the feeling tradition in ethical theory which looks *back* to what is private, rather than *forward* to what is public. It should be noticed, moreover, that Jordan's critique is not directed simply against psychologism; a great deal of the Kantian morality, with its emphasis on intention and the possibly good *will*, falls under condemnation as well. Jordan rejects all backward reference to the person, whether it be to feelings or to some character of will, because on his view to focus attention exclusively on the agent is to neglect the act and thus to give up what is objective.

It is only in the elaboration of the subjective virtues, sympathy, generosity, friendship and integrity,⁶ that Jordan brings out the positive value of the good in its subjective form and calls attention to the partial truth in the view that the good is a form of feeling. Jordan's discussion in this regard (Part III, 175ff.) is among the most brilliant in the book. It not only is concise and clear, but it contains a great deal that is directly and obviously relevant to contemporary society.

(b) Having indicated at least briefly what Jordan understands by the subjectivism he rejects, it is necessary to indicate

⁶ It must not be thought that Jordan is involved in a wholesale rejection of these virtues. See pp. 191, cf. 182 where even in a section entitled "The good is not a mental state," he says, "Let us be clear that we do not mean to deny that these subjective and personal qualities and capacities are virtues. They represent the best in the life of action that can come from the individual, or person considered as their source." He then goes on to say that at best these virtues are but partial because "as states of mind they are never all of what we mean by good."

his own view of the good as a cosmic relation connecting action, agent and the objective world. From this it will be possible to see the points at which subjectivism fails to satisfy Jordan's requirements for a sound ethical theory, and at the same time the way will be paved for an elucidation of his central contribution to ethical theory, the idea of the good life as the corporate person.

Although Jordan's analysis is very comprehensive and includes the whole range of concepts required for ethical theory, it will be wise to confine attention to two, the concepts of *good* and of *obligation*. To consider any others would require too much space, and besides the main drift of the theory can be understood most adequately from these.

With respect to the former concept Jordan's position, except on one or two points, is quite clear. The good is always to be found in the *ordering* of distinguishable units in some objective complex, and hence is never found exclusively in any individual consciousness. The influence of Plato and Aristotle (and, I would add, Hegel) can be seen most clearly at this point. Jordan, as his list of objective virtues proves, is re-defining 'the good' by reference to the social whole or set of objective relations constituting the public world, just as did the classical Greek thinkers in their doctrine that the good life must be found resident in the good state or it will not be found at all. "The good," says Jordan, "is not an intrinsic quality; it is an extrinsic rational system..." (187) and here we have the core of the entire theory.

In his characterization of the good it may be that Jordan's language will cause some confusion. On the basis of what has just been said one might at once conclude that Jordan simply intends to define 'the good' as *relation* instead of as *quality* and indeed there are many passages which would justify such a conclusion (36-7, 49, 140). It should be noted, nevertheless, that he continues to refer to the good as a quality⁷ and this may lead to misunderstanding. The difficulty is not serious and may easily be met by taking into account what he means by 'quality.' The term is used in a sense loose enough

⁷ See, for example, 341 — "it is the public character, then, of the act or object or agent that constitutes its moral *quality*" (italics mine).

to permit the assertion that standing in a certain relation to something constitutes a quality. "The moral *quality*," says Jordan, "is therefore a relation, the quality of standing in a certain position of reference to something" (256). Fortunately, final resolution of the problems involved in the difference between quality and relation is not absolutely necessary for ethical theory (as it would be for logical or metaphysical theory), since howsoever loosely the term 'quality' be used here, Jordan's view of the meaning of 'good' remains clear.

If the locus of good is to be found in some relation, the obvious question is, in the relation of what to what? And the answer is ready to hand: Jordan is at his best when setting forth this decisive aspect of his ethical theory. The distinction, already referred to, between the natural and the cultural plays a central role at this point. "The distinctively moral world," he says, "is the world in which all factors and parts of the system of nature and culture are integrated into a whole which gives adequate expression to every purpose" (256).

Whatever meaning 'goodness' is to have must be derived from the relation between that whole which alone is good and some particular object within it. On such a view the "goodness" of an act or agent "is the relation of the specific case to the whole as principle" (256), with the consequence that an act or agent considered in isolation from all reference to such a whole can never be 'good' or 'bad', just because, as such, act or agent would have no moral quality at all. This reference to the whole, or what Jordan has elsewhere called the cosmic relation ingredient in morality, leads him to locate the good *somewhere* (256-7) in the public situation and not primarily in the individual persons involved. "Good" has no meaning except with reference to "the system of cultural purposes."

An act or agent on Jordan's view may be the referent of good or wrong, but, as he says, "the wrongness is not directly a character of my act" (257), and the emphasis here must be placed on "directly" for "wrongness" is not obviously and simply to be found in the agent (even if *ultimately referred* there), but is rather to be sought in the social structures and systems within which the act occurs.

It may reasonably be asked, in view of the fact that Jordan's theory undeniably directs attention away from the individual agent, what view of obligation is contained within the theory; and this leads at once to our second concept. For whatever obligation may turn out to mean, it surely can have no meaning apart from some concrete individual person, some finite center of experience, *being obliged*. In other words, it is difficult on the face of it to see how the locus of obligation can be shifted from the individual person in the way in which Jordan attempts a similar relocation of the good. We touch here on a matter of some importance, for the nature and ground of obligation has always been and will remain one of the central problems of ethical theory. Jordan recognizes this himself when he says, "The ultimate problem of ethics is to find an objective ground for obligation..." (56). But it remains highly doubtful whether Jordan, in his eagerness to find objective grounds, has not ended with a view of obligation which, defensible as it may be within his own limits, seems very far from what most philosophers and indeed most people have meant when they have used the term 'obligation'.

I do not believe that Jordan has actually made obligation as central to his entire discussion as the previous quotation suggests, nor is he as clear as he might be on exactly what he means by the term. In a particularly difficult section on obligation (55-6) we are told that a certain "identity" of "means and end" constitutes "the objective completeness of the act" and that "it is this last character which enables us to define obligation in non-subjective terms," but as to exactly how this is to be understood and in exactly what sense it defines anything ordinarily to be recognized as obligation remains dark. All we know is that, as should now be obvious, 'obligation' is not to be defined as a 'feeling' or a 'state of mind' but apart from this we are left as much in the dark about obligation as before. Fortunately, Jordan treats the concept of obligation in other places and it is to these that we must turn for possible clarification.

We receive some help when we are told (169) that, strictly speaking, obligation is not "found" anywhere because "it is not the sort of thing that can have a specifically designated

place." Instead "its essence is relational," and when obligation is present in the only "place" Jordan will admit, namely, "the complex structure of the fact system," it is correct to say of it that "it does not exist there but *holds* there." Having discovered that obligation is relational, and that it can be properly said to hold in the cultural world of family, property, etc. it is still necessary to inquire into the nature of the relation. In another place (381 ff.) we are told that, in order to act at all as a moral agent, the individual is *bound* "to his objective world" which itself will determine the form which his action will take. This means that the intelligent person must take into account the whole of the complex situation in which he stands as the basic condition of action itself, and consider obligation as logical necessity *holding* there. Despite all Jordan says, however, about the obligatory relation not being subjective he holds that "the consciousness of obligation" is "the apprehension of an instance of logical necessity" (383), namely, the necessity that the concrete situation sets the conditions for action. Such apprehension, it would seem, is a state of mind or it is nothing, and this leads to further questions.

Jordan has done a subtle job of analysis and he has very effectively criticized all theories of obligation that wholly identify it with some individual feeling which is private and terminal in itself.⁸

Certainly, however, Jordan cannot regard one as a hopeless subjectivist for asking and answering in the negative the question: What intelligible difference can there be between obligation and the consciousness of obligation? Even granting that it is an error to *identify* obligation with some mental state (taking 'mental state' in the broadest possible sense),

⁸ Although Kant is briefly mentioned by Jordan in his discussion of obligation, no cognizance is taken of the fact that Kant also tried to show that obligation is not a "mere feeling" (see Kant's *Grundlegung*, 22 note, for his ingenious idea of *achtung* as a state of mind "self-wrought" by a rational concept), I find it difficult to see any appreciable difference between Kant's view of obligation and at least what Jordan calls the "consciousness of obligation." This is a matter of some importance due to the fact that Jordan places Kant among those dependent on "subjectivist assumptions."

can 'obligation' have any meaning at all apart from such states? Can objective situations and complex systems of fact be obliged? Is it not nearer to the truth to say that only individual conscious persons or groups having some identifiable continuity of consciousness can be obliged, and that howsoever legitimate it may be to focus attention upon the undeniably objective relations necessary for defining obligation it is always wrong to lose sight of the fact that, if morality is not to be a sham, obligation must always find its locus and meaning in consciousness since apart from consciousness there is no morality at all? A great deal of what Jordan includes under objective obligation is rather a description of the situation *which obliges us* and within which obligation holds, rather than the obligation itself. And the only way to deny this is to maintain that objective situations can be obliged, a thesis which it would require considerable ingenuity to defend.

(c) To what has already been said it is not necessary to add a great deal in order to indicate the precise points at which Jordan considers subjectivism in ethical theory inadequate. For the sake of clarity, however, it might be well to state these points briefly. Subjectivism is in error because instead of beginning with the fact of action taking place in objective and determinable situations, it focuses attention on the psychological states of the individual, thereby confining morality to feeling, or at best to a matter of individual will. In seeking for the good in states of mind, subjectivism loses sight of the system of relations within which deeds are done and from which alone on his view, they derive this moral character. Jordan's fundamental objection is that exclusive concentration in subjectivist ethics on the isolated person as the referent of moral categories leads to radical individualism and consequently makes impossible those corporate embodiments of experience which are of the very essence of the good life.

In attempting to form some critical opinion of Jordan's theory one must guard against falling into an error which, though in a sense excusable, remains an error nevertheless. It is that one might be tempted to attack Jordan's corporatism for its neglect of the individual and try to oppose to his views some type of refurbished individualism. The reason such an

approach would be erroneous is that Jordan's entire work is an attempt to get beyond the traditional individual/social dichotomy or antithesis,⁹ and nowhere does this come out more clearly than in the brilliant way in which he shows (23, 60, 139) that many social ethical theories are subject to the same charges leveled against individualism. Only here the difficulties are multiplied due to the fact that these theories have invariably begun by accepting the view of the person as an isolated individual and then have gone on to meet objections by appealing to society (and a society conceived as a collection of individuals at that). What needs to be seen is that even if Jordan may seem to be submerging the individual person, he is in fact attempting to give form and substance to individual human action through his concern for tangible embodiment of human purposes. And, if in the course of his attempt the *good man* looms less largely than the *good life*, this is because Plato and Aristotle, both of whom found ethics issuing in politics are, above all others, Jordan's philosophical masters.

Supposing, however, that we do not make the mistake just noted, may it not still be possible without in the least defending the subjectivism which Jordan rightly rejects to ask whether Jordan, in his passion for the principle of corporeity, has not neglected certain features of subjectivism and certain aspects of the individual person's moral experience. He has, I believe, gone much too far in suppressing the importance of the intention and motive of the individual agent in the determination of the moral quality of the deed (see 268 esp.; 359 ff.). The conviction of Christianity, a conviction to be found in a similar form in Kant, that *whatsoever a man thinketh in his heart, so is he*, cannot be so easily dismissed as is supposed by those who, like Jordan, want to shift the locus of moral quality from the private self to public structures. Jordan would no doubt reply that such an emphasis fixes attention on the *good man* to the neglect of the *good life* and that the latter is what is

⁹ One cannot help but note the marked similarity at this point between Jordan's position and that of Hegel regardless of the ultimate metaphysical differences which may exist between them. In *The Philosophy of Right*, Hegel made the same attempt to synthesize individuality and corporeity in the all-embracing ethical life.

important. But then again, surely no form of life can legitimately be called good which is not the expression of individual persons who are themselves good.

In order to deal more directly with the problem raised here, it is necessary to go back to Jordan's idea of action. Action, he says time and again, is the fundamental fact for ethical theory and the moral quality of action is said to consist in the cosmic relation already discussed between the act and the world. The question which must arise is: What part, if any, of the act is constituted by states of mind, suggestions, intentions, purposes, etc. and what is their relation to moral quality? For indeed if moral quality pertains to action alone, and action is defined as exclusive of states of mind, it would follow directly from the definition that they are not relevant in determining moral quality. But if this is the case some warrant will be needed for neglecting them in view of the fact that it is hard to see how they can be rejected as genuine constituents of the moral situation. Jordan often speaks about the same act being accompanied by different states of mind and this raises a difficulty, for it is only on the basis of already having separated the act as objective from the consciousness of the agent to whom it alone *belongs*, that he can speak of the *same* act accompanied by *different* states of mind.

I find Jordan far from clear on the whole matter. On the one hand he certainly means to deny that the act as the subject of ethics contains thought as a constituent (esp. 18, 116).¹⁰ Yet on the other hand we are told that an act is "in the last resort an act of mind" and, further, that action is distinguished from movement by "the presence in it of cognition." It may not, however, be absolutely necessary to settle this issue in order to come to some decision concerning the relation between states of mind and moral quality since it is possible that the two questions are independent. In other words it might be the case that states of mind are not relevant for determining the moral quality of an act whether they are taken as part of the act so-called or not. The fact remains nevertheless that Jordan

¹⁰ Cf. 362 where it is asserted that "ordering in thought is not an act in the sense contemplated in ethics."

admits (but, to be sure, reluctantly) that, for example, when an escort makes an "improper suggestion" to a young woman the "quality of the suggestion is not changed merely by the fact that it is never realized or that its consequences are deferred" (22). And this can only mean that a suggestion can have a quality (and a moral one, unless 'improper' is to be construed in some other sense) which it possesses apart from action, implying that states of mind *in themselves*¹¹ are not irrelevant morally.

Jordan is fond of criticizing the view that the good of an act cannot be determined by asking about the intentions and motives of the agent,¹² and he goes so far as to say "the same act may be adjudged good when regarded as the consequence of very different states of mind" (22). But, howsoever valid may be his criticisms against the morality of intentions, Jordan is simply wrong if he means to say that states of mind are so completely divorced from the act that ethics may disregard them in determining a good action. Let us take Kant's illustration of the two men each of whom does not overcharge an inexperienced customer (certainly not an illustration of the fantastic sort usually found in books on ethics) as a case of the *same act* accompanied by different states of mind. The one acts as he does because he is convinced that he *ought* so to act, while the other acts as he does because he considers it *good business*. Presumably there is nothing in the act considered only as what is public and objective which manifests the difference in the states of mind. The question is, does Jordan mean to say that, from the standpoint of morality, there is no difference here? I confess that I am not sure, which is precisely why it seems to me to be of such importance to know whether states of mind are part of the act or not. It seems an

¹¹ The expression 'states of mind in themselves' must here be understood to mean 'states of mind considered without regard to or concern for anything but themselves, particularly without regard to or concern for actions or consequences which can be said to be their expression.'

¹² Surely such a view, if developed consistently, must prove embarrassing for ethics in view of the fact that the law recognizes as valid the distinction between first and second degree murder, a distinction which clearly cannot be made on the basis of public action alone. Jordan does not, however, consider this point.

unwarranted separation of the factors in the situation to divorce the act from the states of mind and find the genuine moral quality only in the act taken as something which excludes them. To be sure, Jordan does at times take states of mind very seriously into account especially in his analysis of the subjective virtues, but then despite this he can still say, "States of mind in themselves have no inherent moral quality" (22). Does this mean that, for example, if I hate someone violently such that at a given time there are no obvious objective acts giving expression to such hatred, that no moral judgment whatsoever can be made about the *fact* (and it is a fact) that I hate so and so? The answer on Jordan's view would seem to be yes, but again I confess that I am not sure.

Let us consider another illustration. Suppose someone comes to me for advice and I suggest a certain course of action to be pursued, having reason to believe at the time that it will require great determination and strength of mind for that particular person to come to the decision to carry out the suggestion. Suppose further that the person makes the decision and carries out the action, shall we then say that the coming to the decision is nothing different from the actual doing? Certainly not, for surely there are two distinct things here; one is *the coming to the decision* (particularly in view of the fact that it required great effort) and the other is *the action itself*. Is the first of no moral significance whatsoever? Is the self-determination of the coming to the decision, involving as it does complicated states of mind, not in some sense an action on the part of the person such that even on Jordan's view it might be said both to have moral quality and to be relevant in determining moral quality? I do not find solutions for these difficulties in *The Good Life* and it is to be hoped that Jordan will find occasion in the future to address himself to them.

There is a final point which cannot be passed over in silence and it concerns Jordan's view of religion. I find his references to this subject certainly among the weakest in the entire analysis.¹³ First of all it is surprising in a thinker who

¹³ If space permitted, a great many questions might be raised concerning Jordan's chapter "Religion and the Organization of Faith" as well as statements about religion scattered throughout the volume. Some

has a genuine passion for the facts of situations, to find that instead of looking to the historical, psychological, etc. record for his understanding of what religion actually has been, he shows himself an uncritical follower of much modern theory by taking religion simply as a form of *feeling* (see 314 f.). Religion for him seems to be a wholly private affair of feeling which has concern for "values" only "independently of their relations to the facts of existence" (277, cf. 320). Since this is not the place to develop a philosophy of religion, it must suffice to say that any such basically esthetic view of religion is inadequate on the face of it because it includes only a small range of data. Armed with this restricted instrument of interpretation, one can scarcely hope to understand the phenomenon of religion in all its complexity.

Jordan falls into another error in this regard which is even more serious when, in consonance with his basic world view (although not entirely in accord with his esthetic view of religion), he declares religion to be one factor besides others in man's great effort to *control* his world (see 8). What he fails to see is that the truth and devotion implied in genuine religious faith is poles apart from the motive to *control*; the man of faith offers himself to God, and in so doing he does not intend either his faith or his God to be an instrument through which to master circumstance, however much this may be the vicarious result. And, it may be added, it is just to the extent to which the would-be religious man seeks to control or manipulate his world by means of religion, that such religion passes over into magic and superstition. It is true that in one place (319) Jordan's view seems to run counter to what has just been said when he points out that though morality "involves the function of control," religion "is a matter of freedom,"

matters particularly in need of further discussion are the following: the sense in which religion is simply one *practical* interest besides others; the idea that religion is essentially the *provisioning* of ideal or intuitive ends; the notion of faith as a *species of cognition*; the formulation of the problem having to do with the relation between religion and morality as the question: Does the ritual, taken as the characteristic *act* of religion, have moral quality? This latter problem is of the first importance, but to formulate the problem in this way is to leave aside most of what is important.

Nevertheless, Jordan is wont to regard religion as one form of expression besides others within the good life, and the latter is always under the dominant motive of control. On such a view religion inevitably becomes a means to some further end beyond itself, and when religion becomes a means it is, at least in its genuine form, at an end.

Taken in the large, *The Good Life* is a volume deserving of careful study. Such study will reward not only philosophers but political and legal theorists as well, just because Jordan's vision of the good life is broad in scope and encompasses the whole range of institutions and social forms in which human life and creativity are expressed. There is no doubt that this is a significant contribution to philosophical thought and one which will not soon be forgotten.

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SOME VARIETIES OF RELIGIOUS BELIEF

Half a century ago William James published *The Varieties of Religious Experience*. He was mainly interested in the varieties of mood, temperament, and emotionality which qualify the religious experiences of different individuals. Due to a most fortunate combination, in his own temperament, of sympathetic imagination and scientific curiosity, his great book is still one of the best books on the psychological variables in the domain of religion.

Since then a good deal of attention has been focussed on the sociological variables in religion, by anthropologists and sociologists, so that our knowledge of religious groups (varying both in their internal constitutions and in their functions in society) has been considerably extended. Much of this research has been taken account of by Joachim Wach in his typological *Sociology of Religion*.

Along with the psychological and sociological variables in religion there is another dimension, so to speak, within which forms of religion vary. We might speak of the intellectual variables in the domain of religion, meaning the varieties of religious belief. We would have in mind both variations in the object believed in, and variations in how the object is believed in, the modes of believing. One way to explore this sort of variable would be to sample appraisals of religious belief and proposals for religious belief now being made in the current literature. This I propose to do, hoping to throw some light on the nature of religion by way of a study of some of the varieties of religious belief.

In John A. Nicholson's *Philosophy of Religion*¹ the author considers the "interpretations of religion" given by Spinoza, Kant, Comte, and Bergson, and includes extensive selections from their writings. It is designed as a text and is well suited to this purpose, being solidly and clearly written. It is temperate and critical. The point to which I want to call attention is an inconspicuous feature of the book, and my

¹ New York, The Ronald Press, 1950.

critical comments should not be taken as serious detractions. I want to notice the definition of religious belief with which Nicholson operates in his critical conclusions, which is more conventional and restricted than the explicit definition in his introductory chapters.

In the concluding chapter of his text he proposes to criticize the four philosophers "from the perspective of religion," that is, from the viewpoint of the contemporary "apologist for religion," with whom the author does not identify himself. This means the viewpoint of "those who are religious in the usual sense of the word," or "those who believe in religion" (*sic*). From the criticisms he develops from this viewpoint it seems that there are certain beliefs, not merely certain sorts of beliefs, which are incompatible with being religious, and certain other beliefs which are essential to being religious. Thus "a religious man, Bishop Berkeley," regarded Spinoza's determinism as a "pernicious belief" (212). Again, "the religious man would object to the Kantian belief that the ideas of God and immortality are merely postulates of practical reason" (214). And, "from the perspective of religion," Comte's views have "a curious mixture of truth and error" (216).

Being religious means here being religious "in the usual sense of that term," and this means having a certain set of beliefs, not merely having beliefs of a certain sort. What this language suggests is that, where Berkeley disagrees with Spinoza, we have a disagreement not between two non-religious beliefs or between two religious beliefs, but between a religious belief and a non-religious belief or even an irreligious belief. It would seem to be inconsistent to be a Spinozist and a religious man at the same time.

I think this makes for confusion, for I do not think we would ordinarily say that Spinoza was non-religious because he was a determinist, or because he identified God and Nature. Some people we would ordinarily call religious have been determinists (Calvinists), and others have identified God and Nature (Stoics). I am not now arguing that Spinoza was religious, although I would say he was, but rather that these are not good grounds for denying that he was religious.

The root of the confusion in this case is the adoption of a conventional (in the sense of a social convention) definition of 'religious beliefs.' I do not mean to say that those religious beliefs which at any time and place are most generally held should not be discussed. We get into trouble, however, as soon as we use language in such a way as to suggest that these religious beliefs exhaust the range of the variable.*

The most important consideration about the use of language is: what usage will allow us to say more of what we want to say? If we want to say that most religious people do not believe something or other, we should say this in such a way that we can say some religious people do believe this, in case we should want to say that also. What we need is not a private language but an extraordinarily careful use of ordinary language.

The mistake of identifying the species with the genus is even more serious when "religion" is used as a name for something less vague than "what we usually mean by religion," when it is used to mean supernaturalistic religion, or Christianity, or Platonism, for example. Here the case is usually quite different from that above. This is often a technique of persuasion. The writer is not interested in a generic definition of religion. He wants us to adopt some particular religious belief. And he thinks there is some rhetorical advantage in identifying this particular set of religious beliefs with "religion." Even such inelegant expressions as "religion holds that" or "religion believes that" or "religion teaches that . . ." are sometimes used to reenforce this identification. In this case, the species being for the writer the most important or perhaps the only important member of the genus, it becomes an easy transition to substituting the name of the genus for the name of the species. (The logical justification would parallel that of Ko-Ko in *The Mikado*: Since your majesty's word is law, when your majesty utters a command, it is as good as done, in fact it is done.) The suggestion conveyed by this metonymy is that if one is not a Christian, or a Platonist, or whatever the case may be, one is not *really* religious. This sort of language does no good and much harm both to particular religions and to clarity

of thought about religion in general (i.e., the class of particular religions).

In other cases there is resistance to a generic definition of religion from the opposite side. People who have reacted against supernaturalism, and *see through* it and reject it, think that they can, by implicitly defining religious beliefs as supernaturalistic beliefs, dispose of two questions at the same time. Religion is then a matter about which they do not have to think any further, and about which no further decisions are called for — Marxists and Freudians, for example.

Again, for apologetic purposes, proponents of some faith sometimes deny that this faith is a form of religion, like Marxists denying that dialectical materialism is metaphysics. For example the Jehovah's Witnesses attack *religion*, where what they attack is all other forms of religion but their own. At a more sophisticated level Karl Barth in his earlier writings, contrasting the Word of God with the Word of Man, seems to say that the Christian faith is not a religion. For religion is something human (experiences, institutions, beliefs) while Christianity is divine revelation. This usage obscures otherwise obvious facts. The practical consequence is that a defensive barrier is illegitimately constructed against the appropriate type of criticism.

All these are instances of confusions which arise when the range of the intellectual variable in religion is arbitrarily restricted either by identifying the species with the genus or by excluding it from the genus. So I have been appealing for recognition of a more extended range of the variable of religious belief than conventional definitions permit. We have found it possible to assimilate to our conception of religion the many strange attitudes, practices and beliefs which anthropologists have found among primitive peoples, and which they do not hesitate to call religious. I am asking that we be willing to recognize unconventional forms of religious belief in our own culture. Why should we think that the practices of the Todas or the Chukchees can illuminate the nature of religion more than the beliefs of contemporary followers or successors of Comte?

It may be argued that unconventional religious beliefs are unimportant in comparison to traditional religious beliefs in our contemporary culture. Even if this is true, it does not mean that they are negligible, if we are looking for better understanding of religion. We understand the usual better by understanding the unusual.

Again, the main argument here is for a set of concepts and a terminology which enables us to say *more* and to say it more clearly. We need a set of concepts about religion within which popular preachers, Jehovah's Witnesses, Karl Barth, contemporary religious humanists, and so on, can clearly say what they want to say, and within which their opponents can say what *they* want to say also, without entangling themselves or each other in verbal contradictions. Only so can the real contradictions and disagreements be discerned. We need a generic definition of religion adequate to describe contemporary varieties of religious belief, as well as the psychological and sociological variations in religion with which we are now more or less familiar. Without such a definition, contemporary proposals and counterproposals for religious belief pass each other like ships in the night, for we are unclear about the questions to which competing answers are being proposed.

An example of the kind of mistake I have been talking about occurs in Dean Emeritus Albert C. Knudson's recent *Basic Issues in Christian Thought*.² In the course of a discussion of naturalistic humanism, he says, "'Godless religion,' strictly speaking, is a self-contradictory expression" (28). Why does not Dean Knudson want to call such forms of humanism religious? "To give up the belief... in divine providence is to turn over to the enemy the innermost citadel of religious faith" (28). He is defending theism and in particular a certain form of theism. Would it not be a more effective apologetic to take the proposal of such humanists at its face value, as one of the possible values of the variable of religious belief, and then ask how good (in terms of whatever criteria are relevant) this kind of religion is? He could then apply to this religious proposal the kind of critical appraisal which is

² New York, Abingdon-Cokesbury, 1950.

appropriate to any religious proposal. The point is that in this way *more* could be said by the humanists and by Dean Knudson. They could make their religious proposal; he could make his criticisms. To read the proposal out of court has the effect, like Tertullian's *præscriptio adversus hæreticos*, of restricting discussion.

Suppose we should say that religion is devotion to what is regarded as most important in the universe. Then what would need to be argued is whether God or humanity is most important in the universe, in the sense that human beings should orient their lives in a profound and radical way toward one or the other. The proposal that we should direct our religious devotion toward humanity certainly needs to be worked out more clearly by contemporary humanists. But this is not to say that it is not a religious proposal. On the contrary it is to say that, *taking* it as a religious proposal, I find it lacking, at the present time, in theoretical elaboration and articulateness. I suggest that whether or not a belief is a religious belief depends not on whether it is a belief in this object or that object but on what sort of interest leads the believer to ask the question to which the belief is an answer. Religious questions are asked by people who have religious interests (or presuppose such interests in others). Religious beliefs are answers to religious questions.

Here for example is *The Community of Man* by Hugh Miller,³ who is probably not responsible for the following selection from the publisher's blurb:

"Many readers of today have grown tired of doubts and self-searchings. They are anxious for something that will offer plausible and scientific reasons for our American optimism and faith in the future. Mr. Miller's book... is a reassuring affirmation of the cosmic validity of progress."

But the book does seem to be aimed at giving people something to live by, a kind of faith. And the author seems to be proposing it as a religious faith. For example, "evolutionary science is moral wisdom because it is religious truth" (94). Indeed, at times he seems to view his proposal as a restatement of Christian truth (97). At the end of nearly every

³ New York, Macmillan, 1949.

chapter the emotional tone is precisely that of an ascription following a sermon, so that one catches oneself saying, "Amen," and bowing one's head.

Now I am glad to leave the author's biological views to biologists, and consider here only the attitude he recommends as the "true religion" (143) which should replace "false religion" and "irreligious faith" (95). This religion is the pursuit of mundane truth, but not merely the pursuit of truth. For the truth has been found, not in "modern theoretical science" but in "evolutionary science," and the truth is that we human beings are the creators of the world. There is the "shawl of life," with its pattern of the "progressively fixated groups."

"But the weaver of the shawl is no part of it. It is that group which became mankind. Man is not, and never was, a species, a genus, a type. When man to himself is true, he is the group which created all specific and other types" (54, italics in text).

(This is not a myth, mind you, but science.)

"We are the group in which originated the variations which established new associative type preserving and amplifying the life on this planet. We created and continually redeemed this terrestrial life, in virtue of the association or community which preserved these individual variations in group type. We, and no celestial fiction, are the god of life, which is our handiwork... Let us prize only what is "specifically" human, and we will prize and cultivate those plant and animal populations which condition our persistence. *In increasing our own population, we increase the living population* on this earth. Evolutionary biology has a quantitative measure of value in the population of this earth; it has a qualitative criterion of value in the adaptation which conditions living persistence; and it provides a science of value in the knowledge of what has conditioned living increase in the past. Here is a moral and religious science of the creation of life" (96).

"Religion would tell us that truly good, best of all, absolute and eternal good, is the activity of creation itself." (96) The true religion means "adoration of creative act, truly God if God there be" (98). And the creative godhead is man. Therefore should we not

"... find our creation good, even as on that first day, and take delight in it? Let there again be light, life, joy, man and nature's increase! Let creation work! (144).

"Our reach lengthens, until it is concern with cosmic creation in all the future. Concerned with Cosmos we always were in some

degree; but now, through science, we take deliberate hold of the levers of creation [a phrase he uses several times], knowing our handiwork" (144).

Now someone may say this is absurd, and perhaps in a way it is. But the only way to see whether or not it is absurd is to take it seriously. At least one superficial absurdity can be removed. It might seem that if human beings are the creators, or together are the creator, what is there for human beings to worship? But this proposal is addressed to me, a single human being, by another single human being. The *we* of which he talks is different from the *me* and the *he*. He must know that both he and I are often impotent rather than powerful, and destructive rather than creative, and that our spans of life on this planet are brief. So I do not believe he really means that I should worship or adore *myself* as the creator of the cosmos. No, I think he means there is an entity, "mankind," which is different from me, to which I should give my adoration and devotion. It is true that there is a sense in which I can have a part in the creative work of this entity and sometimes do, and therefore it is not altogether alien from myself. But it is different enough from myself to serve as an object of my devotion. The self which is a part of this entity is a sort of transcendental self in relation to *me*. And therefore it is not self-contradictory for him to propose that I should glorify mankind and serve it (the *us*) forever.

We may or may not doubt whether the author's facts and values are sound and clear. The question is whether this is a proposal for religious belief. I am inclined to think it is. It proposes an object to which human beings should devote themselves. This object is, on the author's showing, supremely important in the universe. It is powerful and it is good, and it is the source and standard of good. Notice incidentally how well the peroration quoted above expresses that kind of religious feeling which Rudolph Otto called *numinous exaltation*. So I think we should regard this as a statement of religious humanism, a kind of religious belief of which other more sober variants are also possible.

Another value of the intellectual variable in the domain of religion is illustrated by *On the Resolution of Science and*

*Faith*⁴ by Wendell Thomas. This is an unconventional and rather original (in the way it is worked out) proposal for a religious naturalism. It contains an anti-dualistic interpretation of the history of western philosophy, and a good deal of discussion of modern scientific theories, but the author speaks of it as a "religious book" and I think it should be taken as a religious proposal. He takes his fundamental clue to the nature of the object of religious belief from the Vedanta and from Anaximander. God is "real indivisible space, God's spirit is purposive time, and God's body is the complex of concrete masses known as the physical universe" (176). There are affinities with the Stoics, and with Spinoza. God is "Indivisible Nature."

"Every organized structure, whether living or sub-living, is in some way and to some degree the manifestation of a creative and stable material substance, a substance which is the end of 'ends' and the whole of 'wholes'; in brief, a material God" (214).

Here again I can well imagine that some people will say, "But this is not a *religious* belief." Some of the reasons for such protests I have already discussed. One answer would be that if the maker of a proposal calls it a religious proposal, we should treat it as one and examine it as such. And there is much to be said for this. It is better, however, to ask what function, under the terms of the proposal, the proposed belief would have in the total complex of human interests. This is not exactly a question about whether the proposer is himself religious, but whether the object proposed for belief is proposed as a religious object. Is it an object toward which life would be oriented in a certain way, in such a way that all other objects of interests would be subordinated to this object? I think this is clearly the author's intention.

He is offering a reconciliation of science and faith. On his view, both the normative sciences (logic, esthetics and ethics) and the descriptive sciences become branches of theology as fundamental science, or as Lord Gifford said, "in one sense, the only science, that of infinite being." But since the infinite being is not apart from nature but is identical with nature, this is not a supernatural science or a pseudo-science.

⁴ New York, Island Press, 1946.

This is clearly not humanism. The religious object is something more inclusive than humanity. And it certainly differs from traditional theism. But I do not see how we can fail to recognize it as a religious proposal. Here is a man who has gotten a perspective on himself and his world, a perspective which both effects and reflects a certain pattern of interests. This pattern of interests is such that there is in principle subordination of all other interests to a certain object which is itself thus the object of a religious interest.

Here I want to insert a word about *subordination*. Subordination does not necessarily mean restriction of scope or diminution of intensity. It means rather that *this* is more important than *that*. In *world-affirming* religions other objects are construed as manifestations, modes, or creatures of the religious object, so that interests in other objects do not have to be excluded, restricted or diminished in intensity, so long as they are not confused with or substituted for the religious object (idolatry). In *world-denying* religions, a certain exclusiveness of the religious object is emphasized, so that all other objects tend to lose value, and interests directed toward these objects tend to be restricted in scope and diminished in intensity.

Returning to Thomas' proposal, to brush it away as being "not really religious," or to ignore it because it is unconventional would be provincial and stupid. The intelligent procedure is to take it as a statement of a form of religious naturalism, and give it the sort of critical examination all religious beliefs should have, in addition to examination of the scientific, historical, and philosophical statements in the context of which the religious proposal is made.

Now I want to come back to Dean Knudson. His book is a discussion of some current disagreements about Christian beliefs, and his distinctive point of view is due to the fact that he is a personalistic idealist as well as a Christian. He is the author of a standard text on personalism first published in 1927 and recently reissued, *The Philosophy of Personalism*.⁵ Let us ask how his personalistic beliefs are related to his Christian beliefs.

⁵ Boston University Press, 1949.

Notice first that for him personalism is

"...a faith quite as much as a philosophy, and as such stands structurally related to that higher type of idealistic and religious thought which since the time of Plato has commanded the assent of many of the world's profoundest minds" (*The Philosophy of Personalism*, 427).

This is borne out by his description of the effect of the teaching of Borden P. Bowne, founder of modern personalism:

"It would be difficult to describe the effect which Bowne's exposition of this truth had upon those who heard him. It proved to them a veritable gospel, a deliverance from intellectual bondage. Their spirit was released from the leaden weight of a crude realism or materialism or pantheism. What the doctrine of justification by faith meant to Luther's religious life, that did a personalistic metaphysics mean to their intellectual life. It wrought for them their intellectual redemption" (*Basic Issues in Christian Thought*, 45).

It would seem that personalism is a strand woven into the texture of his religious beliefs, rather than a set of beliefs of a different order, subordinated to his religious beliefs.

The close relationship between his beliefs as a personalist and his beliefs as a Christian appears also when he argues, against contemporary theological irrationalists, that the Christian faith can be rationally justified, metaphysically and epistemologically. The metaphysical justification of the Christian faith consists in the arguments for a personalistic metaphysics, including arguments against the metaphysical reality of matter and material things. The epistemological justification of the Christian faith turns on the thesis that

"...the fundamental subjective interests of the human mind have trustworthy objective implications, and that religion is one of these interest... If, therefore, religion in its highest and essential form implies belief in the personality of God, as I have sought to indicate, we are philosophically justified in holding this belief in default of positive disproof" (*Basic Issues*, 66-7).

In order to justify the Christian faith rationally, one must agree with personalistic metaphysics and idealistic epistemology. Those doctrines of Christianity which are not deductible from personalism can be shown to be consistent with personalism. For example, "It is quite possible to give to the doctrine of the Trinity a personalistic interpretation" (*The Philosophy of Personalism*, 333).

If we should ask Dean Knudson whether he is a Christian or a personalist, he would certainly answer, "Both," and he would probably answer with some asperity. This is an answer with which we should perhaps be content, because it is true. Though I do not know him, I have the feeling that he is like a theological professor I had, who once said, "I want a theology that fits me like an old coat." The more I have thought of it, the more this has impressed me as a fine bit of wisdom, and I think Dean Knudson's system of thought must fit *him* like an old coat.

When however it is not a question of how Dean Knudson's beliefs fit *him*, but how Christianity and personalism fit each other, is it like a hand fitting into a glove? Which is the hand and which is the glove? We sometimes want to ask the question, about a set of religious beliefs, what is the starting point for the inquiry by which these beliefs are arrived at? Or, what is the basic standpoint from which religious questions are being answered by this believer?

In a vigorous attack on "the lurking ghosts of a false supernaturalism and a false authoritarianism," Dean Knudson says, "The one judge of truth in both philosophy and theology is the illumined human mind" (*Basic Issues*, 41). This is sound and true. But what enlightens us? What is the source of our illumination? With what clue to truth have we begun?

One way to answer these questions is to say that we take our clues wherever we find them; here a clue, there a clue. And perhaps that is the best we can do. Certainly we should do no worse, i.e., no promising clues should be ignored or rejected. But it is hard to follow two clues at the same time, unless they take us on parallel courses. Even then our stance is awkward. And is the parallelism a coincidence? Or is one of the courses the shadow of the other?

I suggest that the coherence of a set of religious beliefs depends upon the presence of some one controlling principle, and that one source of confusion in religious beliefs is lack of self-knowledge about what one's controlling principle, as a matter of fact, is. If for example a man says he is both a Buddhist and a Christian, then I am likely to think that one

and only one of the following propositions is true: (1) he is a Buddhist whose understanding of life has been enlarged by Christianity, and he sees the truths he has discovered in Christianity from the perspective of Buddhism, i.e., his Buddhism illuminates his Christianity; (2) he is a Christian whose understanding of life has been enlarged by Buddhism, and he sees the truths he has discovered in Buddhism from the perspective of the Christian faith, i.e., his Christianity illuminates his Buddhism; (3) he is neither a Buddhist nor a Christian in the sense of propositions (1) or (2), but something else, perhaps a Bahaist or a theosophist or a devotee of Platonic essences, whose understanding of life has been enlarged both by Buddhism and by Christianity, and he sees the truths he has discovered in them from this third point of view; (4) he is confused, because he does not have a point of view, or he is not clearly aware of what it is, and I shall not expect to find his religious beliefs very coherent. Instead of taking Buddhism and Christianity as examples, it might have been more to the point to take religious humanism and religious naturalism, a contemporary combination which is a very prolific breeding ground for confusion.

This is not to suggest that we should not inquire, or that religious beliefs are incompatible with inquiry; on the contrary it would suggest that religious inquiry presupposes a religious belief and cannot take place without one, in the form of a suggestion adopted for exploration in thought and action. Otherwise we literally do not know what we are doing.

An interesting pattern relevant to this point appears in Paul Ramsay's *Basic Christian Ethics*.⁶ This, in my opinion, is one of the most acute and mature treatises on the subject in English. It has historical perspective but does not substitute knowledge of the past for analysis; it asks real questions and gives much more than textbook answers; it does not make one feel the need of going around opening windows, as Nietzsche said he felt when people talked about Christianity; but above all, or almost above all, the writer has achieved a high degree

⁶ New York, Scribners, 1950.

of freedom from the kind of confusion which comes from walking two roads at the same time.

Philosophically he is an idealist, though he is also indebted to Kierkegaard, but he succeeds in making it clear that Christianity is neither identical with idealism nor bound by it.

"While Christian love makes alliance or coalition with any available sources of insight or information about what should be done, it makes *concordat* with none of these . . . Christian love remains what it is, dominant and free. It does not transform itself into the coin of any realm, though it enters into every realm and becomes debtor both to the Greek and to the barbarians" (344).

And while he thinks that at the present time there must be a Christian *employment* of idealistic ethical theory, comparable to Augustine's use of Platonism and Aquinas' use of Aristotelianism, he also makes it clear that there is a point at which the believer must decide whether he is an idealist or a Christian.

"The ethics of idealism constitutes the *chief* rival of Christianity [in the modern world] because so often the ethics of self-realization and Christian ethics have been identified as one and the same; and idealism is the *chief* rival of Christian ethics because what idealism calls "the good" Christian ethics calls sin or idolatry, namely, the intentional pursuit of self-realization" (301).

So, though he remains a Christian and an idealist in the sense of proposition (1) above, he does not insist on idealism as a prerequisite to Christianity or as an inevitable ally. For example,

"Persons who themselves agree with the present writer in accepting some form of rapprochement between a Christian and an idealistic interpretation of human nature cannot exclude the possibility that other Christians likely will remain convinced of some form of naturalism. This may be held by some to be both philosophically more defensible and more suggestive for drawing up the principles of a social ethic than humanism, which, it must be admitted, always tends toward an unchristian dualism" (276).

I do not think the expression, "a Christian employment of idealism," is a happily chosen one, if Ramsey does *not* mean that a Christian should use idealistic arguments without believing in idealistic assumptions. If he *does* mean this, though I am inclined to think he does not, then his references to Augustine and Aquinas are misleading. Augustine did not use Platonism; he *was* a Platonist who was also a Christian,

and was trying to see Platonism from a Christian perspective. Likewise Aquinas *was* an Aristotelian.

The thesis about religious beliefs I have been exploring is that a set of religious beliefs is coherent only if there is what we might call integrity of standpoint. I hope this will not be misinterpreted as a defense of dogmatism, a plea for orthodoxy, or a charge that confusion is immoral. It is rather a way of pointing out one of the conditions of clarity.

Alan W. Watts, in *The Supreme Identity*,⁷ poses a contrast between "oriental metaphysic" (not to be confused with academic metaphysics) and the Christian religion. Taking his starting point from advait Vedanta teachings, with which he believes Buddhism and Taoism are in agreement, he proposes "metaphysical realization" as that in which "man actually realizes his ultimate meaning and destiny" (14), "the end for which man eats, drinks, amuses himself and exists" (20). By metaphysical realization he means realization of the identity of the Self and the infinite. This is the Supreme Identity.

What is the infinite?

"It is an inevitability of language and thought that all ideas of God, the infinite and the Self suggest some object apart from other objects, some *thing* to be known apart from other things" (191).

Does he mean that the infinite is not an object? If so, then it would seem that the infinite is a state of mind. And when in his final chapter he describes "The Way of Realization," much that he says suggests to me that he does mean this. He describes the Zen Buddhist practice in which one "employs his mind as a mirror," and

"... the flow of impressions is watched calmly and attentively, but without and kind of criticism.

"When this has been kept up for some time, it becomes apparent that there is a ground or inmost centre of consciousness which *always* watches and witnesses the stream of experience in this way, even when we seem to be most absorbed in its turmoil. This is, of course, the pure consciousness of the Self which is never really and principally limited by finite experience" (176-7).

This sounds very close to Walter Stace's "subjectivistic" interpretation of Buddhist mysticism in his presidential address to

⁷ Pantheon Books, 1950.

the American Philosophical Association in 1949, on "Naturalism and Religion."

If this is what Watts means, this state of mind, though its content is ineffable, would still be an object for those who are not in it. A state of mind, for anyone who is not in that state of mind, is an object in the sense that it can be thought of, and at least "pointed to" in some way by those who have had it. It can be wished for, or not wished for. If this is what the infinite means, then Watts is saying that this state of mind is that which gives meaning and value to all other experiences in so far as they have value. This is precisely the function of a religious object. It is that which is most important in the universe. And I agree with Stace that this is one kind of religion.

But I doubt whether this is what Watts means by the infinite. In most of the book he talks about the infinite as though it were an object in a somewhat stronger sense. For example in his chapter on "The Infinite and the Finite" he states "the metaphysical doctrines," and these include a number of attributions to the infinite. It is timeless, of course, but it is also conscious (otherwise how could we explain the emergence of finite consciousness?), and it has knowledge of "everything." It also has imagination. The teachings of the Vedanta about *maya* (the finite universe) are "that *maya* means illusion simply in the sense of something imagined by the infinite" (62). It is in this way the ground and cause of the universe and can "produce any amount of finite energy" (58). It is the ground and cause of both good and evil. And "if the light be splendid enough, the darkness is justified" (120).

"...We can only guess dimly at the perfection of artistry that is needed to harmonize such shadows, such intensities of blackness, as the squalor and depravity of our cities, the tortures of concentration camps, the ugly hypocrisy of the self-righteous, and the piteous suffering of the diseased, the deformed and the insane" (115).

So he is tolerant of those who "*in extremis* cannot be expected to think in accord with the infinite understanding of God."

If he had restricted himself to negative predicates, it would seem that his proposal is world-denying, and he does

not want it to be world-denying. He thinks the Supreme Identity gives a basis for cultural unity, though he is hopeless about the future of western civilization. So his statements of metaphysical doctrine include positive as well as negative predicates of the infinite. I have to conclude that he does not really mean that language is altogether incompetent to describe the infinite. Judging from his language here it is a cosmic reality (*the cosmic reality*) and not merely a state of mind. We would then have yet another value for the intellectual variable in religion. What is most important in the universe is this *object*, which of course is not like any other object. By realizing our identity with it, we fulfill the purpose of our existence, and all other objects are properly subordinate to it because they are manifestations of it.

Now Watts does not want to propose this as a substitute for Christianity, for which, especially for traditional Catholic doctrines and sacraments (which are "the Western world's nearest point of contact with a true metaphysic"), he has a high regard. So he makes a distinction between "metaphysic" and "religion." 'Religious belief,' as he defines it, involves "dualistic" thinking and distinguishes between the subject and the object of thought. Therefore the province of metaphysic (which affirms the Supreme Identity)

"... is a mystery with which religion, as such, is not *directly* concerned, and about which it has no official teaching, since it cannot be expressed directly in the religious type of language" (13).

Religious beliefs depend on sense experience, feeling, and reason, whereas metaphysical knowledge depends on intellect, and is a higher and direct kind of knowledge.

In this way he can say that we may regard the Supreme Identity as the true meaning of existence, and at the same time adhere to the Christian faith or some other religious faith. The two are on different levels and therefore cannot conflict. But there is a condition, namely that religious ideas be held as analogical or metaphorical descriptions of the Supreme Identity. His point is not just that religious language uses metaphors, but that the true meaning of the metaphors is given in metaphysical realization. The belief that God is other than the self and other than the world and that all of these are real

is to him incredible and therefore it cannot be the "true" meaning of religious language. In this way he offers a reconciliation of metaphysic and religion.

This is a peculiar and confusing usage of the word religion. It is peculiar because transcendental mysticism as found in Buddhism, the Vedanta, Taoism, and elsewhere has generally been regarded as a form of religion. What is more important is that it is a confusing usage. It obscures the fact that Watts' own proposal would displace by superseding, though this he denies, some religious proposals now on the scene. Certainly it would displace, by superseding, any religious belief which refused his stipulation about the true meaning of religious language.

He has a set of beliefs about the supreme reality, human nature, salvation, and history which, whatever the truth may be, contradict religious beliefs which have been held by many people without granting the stipulation that these beliefs really refer to the Supreme Identity. To propose that these beliefs be held with this stipulation is in effect to propose another set of religious beliefs, whether a better one or not.

More specifically, he proposes an *object* which would function in experience in precisely the way in which religious objects function in experience. What I have been arguing is that religious beliefs vary as to the object believed in. What is constant is the function of the object in the *universe* of the believer. So I think it is proper to treat the Supreme Identity as a religious proposal, and that it is improper to treat it otherwise.

Whether Christian beliefs are true or not is beside the preceding point. Certainly Watts puts his finger on some sore spots in traditional Christian theology, and he is correct in saying that some of the contradictions in this theology are due to intermixture of "metaphysic" by way of Greek thought. The moral to be drawn from his analysis, however, is not necessarily that the Christian religion should be subordinated to Oriental metaphysic, as I think it would be if his proposal is accepted.

A similar problem about religious beliefs is raised by

Sterling P. Lamprecht's little book, *Our Religious Traditions*,⁸ lectures given to the Ethical Culture Society in New York. He gives interpretations, both sympathetic and critical, of Judaism, Catholicism and Protestantism. He is appreciative of the Jewish tradition of the covenant community, the Catholic genius for synthesis and balance, and the Protestant adventure in freedom.

In his concluding chapter he makes an irenic proposal for mitigating strife among these religious traditions. A "philosophical" cause of strife among them is the supposition that they rest on revelation from God, since each interprets revelation differently. His proposal is "the religious insight of Hellenism" (85), which

"... challenges the validity of any and every appeal to revelation. It presents an alternative to the theoretical foundation upon which the three great religious traditions of western culture have sought to build" (82-3).

It poses the following alternatives (which I confess I should find, as stated, a dilemma):

"(Hellenism) inquires concerning the ultimate before which men ought to stand in reverence. Is that ultimate a power which, by the very compulsion of its fiat, creates the distinction between good and evil? Or is the ultimate rather a value by which all the powers that there may be, small and great, finite and even infinite, may, indeed must, be judged, and to which those powers, whether they conform or fail to conform to its moral demands, are alike subject in principle" (86).

I think it could hardly be clearer that such a value would function as a religious object, and that Lamprecht is entirely warranted in speaking of the *religion of Hellenism*. The question therefore arises whether this proposal, like Watts', is not also a proposal for the supersession of one religion by another. This Lamprecht, like Watts, seems to deny:

"A convinced advocate of the insight of Hellenism may be a faithful Jew, a devout Catholic, a resolute Protestant, a determined atheist, an honest skeptic. Hellenism is not related to any of these positions as each of them is related to the others: it is not a rival to them as they are rivals of one another... the Hellenist, when he waives the question of the existence of God, is putting first things first" (88-90).

⁸ Harvard University Press, 1950.

Incidentally it does not seem quite true to say that a Hellenist as here defined may be a skeptic, without qualification.

Skeptical about many things he may be, but not about the importance of the value which for him is ultimate. But the major question this raises is something like the question about Watts' proposal. Watts seemed to be saying that the way to become a better Christian is to become a Vedantist. Lamprecht is only saying that Jews, Catholics, and Protestants would become better if they became Hellenists. He is not saying, I take it, that they would become better Jews, Catholics, and Protestants, respectively. But I am not sure he would not prefer to have them become Hellenists *instead* of Jews, Catholics, or Protestants, at least in the sense that they would be Hellenists first, and see Jewish or Christian truths from the standpoint of Hellenism.

I think one source of confusion here is a somewhat obtuse view of the meaning of revelation. How does religious belief begin? It begins with an inquiry, with the question, "What is most important in the universe?" "What is the ultimate before which men ought to stand in reverence?" Then how does the inquirer proceed? He looks to history, to private history (George Fox's *openings*, Knudson's experience under Bowne's teaching, an enjoyment of creative use of applied science), or to public history which has been personally appropriated and has thus become private history also (the Vedanta, Anaximander, biological evolution, the vast order of nature, Hebrew history, Plato, the Bible, Christ, the tradition of the church). Somewhere a suggestion occurs, to which the inquirer responds with commitment. Since he is asking a religious question his response, if he is serious, is a religious commitment. The object suggested is suggested as being that which is most important in the universe, or putting it more strongly, as the ultimate before which all men ought to stand in reverence. To accept the suggestion, therefore, is to make a religious commitment. Thus a standpoint and a controlling principle have been determined.

Then the problem for religious thought is to understand more clearly what has been suggested, and what one has com-

mitted oneself to. This attempt at clarification of vision, and at explication of the meaning of the suggestion in relation to the rest of experience, may be relatively successful. Or it may lead to conflicts so serious that the suggestion may be rejected and the commitment withdrawn. Religious inquiry may then cease. If it proceeds, it can only proceed by way of response to some other suggestion.

I suggest that the process by which one becomes a Jew in religious belief and the process by which one becomes a Hellenist (or a humanist, or a naturalist, or a transcendental mystic, or a personalist) are structurally similar, and that in each there is a response to a different suggestion, for which in a phenomenological theory of religious beliefs the term revelation would not be inappropriate. So it seems to me that Hellenism, as here defined, may parallel and rival, rather than overarch, the other religious traditions in our culture. It has certainly influenced their histories.

In brief outline, the suggestions I have been making for a general theory about religious beliefs are as follows:

1. A religious belief is a belief having as its object (what is believed in) something which functions for the believer as what is most important in the universe.
 - (a) The universe is the total field of experience of the believer; it includes everything he can think about, which includes everything he is interested in.
 - (b) What is most important for the believer is that to which he is devoted, that is to say, that to which in principle all other objects in the universe are subordinated.
2. The range of variation in religious belief, both in respect to the object believed in and in respect to the mode of believing, is not restricted by definition otherwise than by 1.
3. A believer believes in only one *religious* object at a time. This follows from 1. The object may, as in polytheism, have more than one "member," for example "the gods."
4. The context of a religious belief is religious inquiry. Religious beliefs are answers to religious questions. Religious

questions are either of the form, "What is most important in the universe?" or are questions which presuppose an initial answer to this basic religious question.

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Notes and Observations

**ON THE UNITY OF THE PHILOSOPHIES
OF THE TWO AMERICAS**

Is there such a thing as a philosophic unity of the two Americas? We have recently heard so much about continental solidarity and Pan-Americanism that one cannot be surprised by also reading about a so-called "Pan-American philosophy." Is this a piece of political propaganda, a legitimate aspiration, or an actual fact?

The general attitude among scholars of both Americas is to deny the existence of such a thing as a Pan-American philosophy. South of the Rio Grande there are those who hold that we cannot even properly speak of Latin-American philosophy, but must speak only of Mexican, Argentine or Brazilian philosophies. Since the truth of this last statement will imply a negative answer to the question of the existence of Pan-American philosophy, let us discuss it, though briefly, in the first place.

The unity of Latin-American philosophy has been denied with arguments similar to those which have been used against the unity of Latin-America as a whole. Compare a Peruvian Indian, a Brazilian negro, and an Argentine of Italian descent, and then list the similarities. Such is the argument, which is sustained by a false assumption: the belief that unity is incompatible with disparity. Those who make this assumption disregard the fact that Latin-America is an organic, structural unity which not only is compatible with diversity but actually supposes it. The unity of homogeneities is not human unity; it is not even the unity of the most elementary organisms. On the other hand, with such an argument, it could be proved that there is no unity within one country. Isn't the Andean Venezuelan different from the Venezuelan of the coast or of Caracas? Nevertheless, no one doubts that all three are Venezuelans; and not only because they have been born in Venezuela, but because they behave, think, feel and speak in a peculiar way that distinguishes them from the other Americans.

We Ibero-Americans behave, think, and feel in a peculiar way that distinguishes us from the North Americans as well as from the Europeans and the Asiatics. What is this peculiarity? Let it suffice to say — for lack of space — that it is something resulting from the union of three elements that constitutes Ibero-America: the European, the Negro and the Indian. Of course, one does not obtain a unity from the sum of the three elements, with each keeping its primitive characteristics. Instead, the three constitute a structure, not only in the sense that the product possesses new qualities but also that the members have lost, when integrating the new unity, a good portion of their characters. The descendants of the Europeans, Indians and Negroes who at present inhabit Ibero-America, are no longer Europeans, Indians or Negroes. I am not speaking from a racial point of view but from a cultural one.

It would require a very long and involved examination to determine the contribution of these three groups to the Ibero-American culture. Actually we are interested here only in the philosophical aspect and in this regard the picture is somewhat clearer.

Philosophy was introduced in Ibero-America by the Catholic priests. What was brought over in philosophical matters is as European as the language that was introduced and the religion that was preached. It is true that here the European ideas acquired a personality of their own, but they still show their European origin. They are still European, even more than is the language that is spoken and the religion that is practiced in Ibero-America.

It may be pointed out that if the picture of the Ibero-American philosophy is maintained at this level, the difference between the philosophy of the two Americas will be slight. Some one will say: Didn't the same thing occur in North America? No one can doubt that North American philosophy was also of European origin. But the two Americas descended from two different Europes: one from **Anglo-Saxon Europe**, and the other from **Latin-Europe**, to put it in general terms. However, this different origin not only gives both Americas a different tradition and point of departure but also a different *Weltanschauung*. That is why we are different from the North

Americans as regards basic concepts. The different philosophical background of the two Americas manifests itself when a foreign doctrine comes in contact with what is going on in the two different places. It is not by chance that existentialism received a warm reception in Ibero-America while logical empiricism was ignored; just the opposite happened in the United States.

I have been a student and a professor of philosophy in South and North America; I have studied the same philosopher — Hegel — under professors from one place and the other; and I have taught the same philosophers — Bergson, Croce and Husserl — in the two Americas. The conclusion of my personal experience is that we live in two different worlds. The play of light and shadow gives the same ideas a different significance. The meaning of a philosopher changes according to the background in which it is projected. There is no doubt that one has to presuppose a different background if one wishes a North American and a South American student to understand a man like Bergson. This does not occur when you go from one country to another in Ibero-America. I have also had this experience which allows me to complement, so to speak, the table of presence with that of absence, as in Bacon's method.

The difference between the two Americas does not consist in the fact that they have different ideas; that the Ibero-Americans are idealists, for example, and the North Americans realists. If this were so, we would be closer than we actually are. The divergence of realists and idealists supposes a common preoccupation, a link which unites them at the root of the problem. The divergence goes farther than just a discrepancy in the solutions: it refers to the problems themselves. The two Americas are separated by dissimilar concerns; they are interested in different problems. It may be said that the diversity of preoccupations is the expression of one whole, more profound concern, and that all the philosophical problems may be reduced to three or four basic questions. If this were so one would have to talk not of the unity of the philosophy of the Americas but that of the entire world. My impression is that in the field of philosophy Ibero-America is still closer to Europe than to

the United States. This, in spite of a very slow but sustained communication initiated during the last few years.

Of what does the difference consist? What is that which attracts the one and the other? The central problem for the Latin Americans is man and his creations. For this reason, not only philosophical anthropology, but the philosophy of culture, history, law, language, etc... appeal very much to the Latin Americans. Ethical and æsthetical problems should also be included. On the other hand, there is less interest in the problem of knowledge and much less for the questions of philosophy of the natural sciences, methodology, analysis, semantics, and especially symbolic logic, which is practically ignored in Latin America. The exact opposite is true in North America: the interest in symbolic logic, methodology, philosophical analysis and semantics is so obvious that it is not necessary to insist upon it.

What accounts for this diversity of interests? The problem is complex, of course, but some reasons can be noted that may be considered legitimate. The first one is humorously simple but nevertheless holds the key to the question: We are different. We have a different historical past; we speak a different language; we feel and think a different way; we have different aspirations and ideals.

Our starting point is emotional and it is deeply rooted in a living experience, while the emotive aspect is non-existent in North-American philosophy or is deliberately pushed aside as non-scientific.

A more concrete reason for the divergence in attitude between North and South American philosophers has been pointed out: the former comes from mathematics and the natural sciences, the latter from the humanities. Though the observation is true, I think it is a mistake to consider that fact as a *cause* of the divergency; it is rather the *effect* of the difference in attitude pointed out in the last two paragraphs. In other words, we do not have a different philosophical attitude because we get a different training, but we "ask for" a different training because we have fundamentally different concerns.

Whether cause or consequence, it is true that the divergence in training of philosophers of the two Americas partly explains the difference of their philosophic utterances and also differences as to the ideals of what philosophy should be. The North-Americans think of philosophy as a rigorous science and want to equip it with the technique and the empirical foundation of the natural sciences. The Ibero-Americans, on the other hand, think the scientific outlook is too narrow and they prefer to sound un-scientific rather than to push æsthetic, religious and political questions out of the picture.

For this reason, Ibero-American philosophy appears to be very vague to the North Americans; and their doctrine seems to us quite narrow and bloodless. The North Americans believe (as well as those Latin-Americans who have been impressed with the rigor of the North-American thought, such as Eurylo Cannabrava), that in Ibero-American we try "to substitute emotional outbursts for methodical inquiry." And they believe that reason is "dismissed or reduced to a secondary position, watching the successful achievements of its happy rivals — faith and intuition."¹ Many Latin-Americans, in turn, have the impression that the North Americans will end by suppressing philosophy altogether when they complete the plan, on which they seem to have embarked, of substituting for the classic and basic problems about the nature of reality, man, knowledge, values, etc., issues about meaning of words or questions strictly technical. Both opinions are exaggerated but they have their roots in facts.

It would be absurd to accept the facts and to throw ourselves to a defense of our respective positions. In my opinion, one has to admit the limitations, vices and exaggerations of both attitudes. Philosophy has to coin and use concepts with a rigor not less than that of the sciences; it must be conscious of the language used, clear about the issues involved and critical of the evidence offered. But rigor must not be obtained at the expense of the amplitude of interests and preoccupations. Wide interest does not necessarily imply superficiality. One is not

¹ Cf. Eurylo Cannabrava, "Present Tendencies in Latin American Philosophy," *The Journal of Philosophy*, XLV (1949), p. 113.

a philosopher because of the rigor in reasoning and the precision in language, but rather because of the kind of concern that he has. The Americas can and must complement each other. We can offer a limitless fountain of emotivity and imagination, a full-blooded humanity. In their turn, the North Americans can contribute, through their great experience and ability in the technical handling of the methodological problems, semantics and logic. With their contribution, the Ibero-American man can become a philosopher; with the contribution of the Ibero-American attitude, the North American philosopher will realize that it is not necessary to cease being in order to become a philosopher.

For clarity's sake, let me summarize in six points the thesis of this paper.

1. The unity of Ibero-American philosophical thought is a fact.
2. On the other hand, there is no unity of the philosophies of the two Americas.
3. We are closer to Europe than to North America as far as philosophy is concerned.
4. The Ibero-Americans have, as their main problem, the nature of man, his destiny and his creations; the North Americans are more interested in questions of epistemology, methodology, semantics, and logic.
5. What is important to the former is how wide and sincere are the philosophical preoccupations; the latter, on the other hand, are concerned about the empirical basis, the rigor of thought, the precision of language.
6. The integration of both forms could do a great deal of good for the philosophies of both Americas.

RISIERI FRONDISI

University of Puerto Rico.



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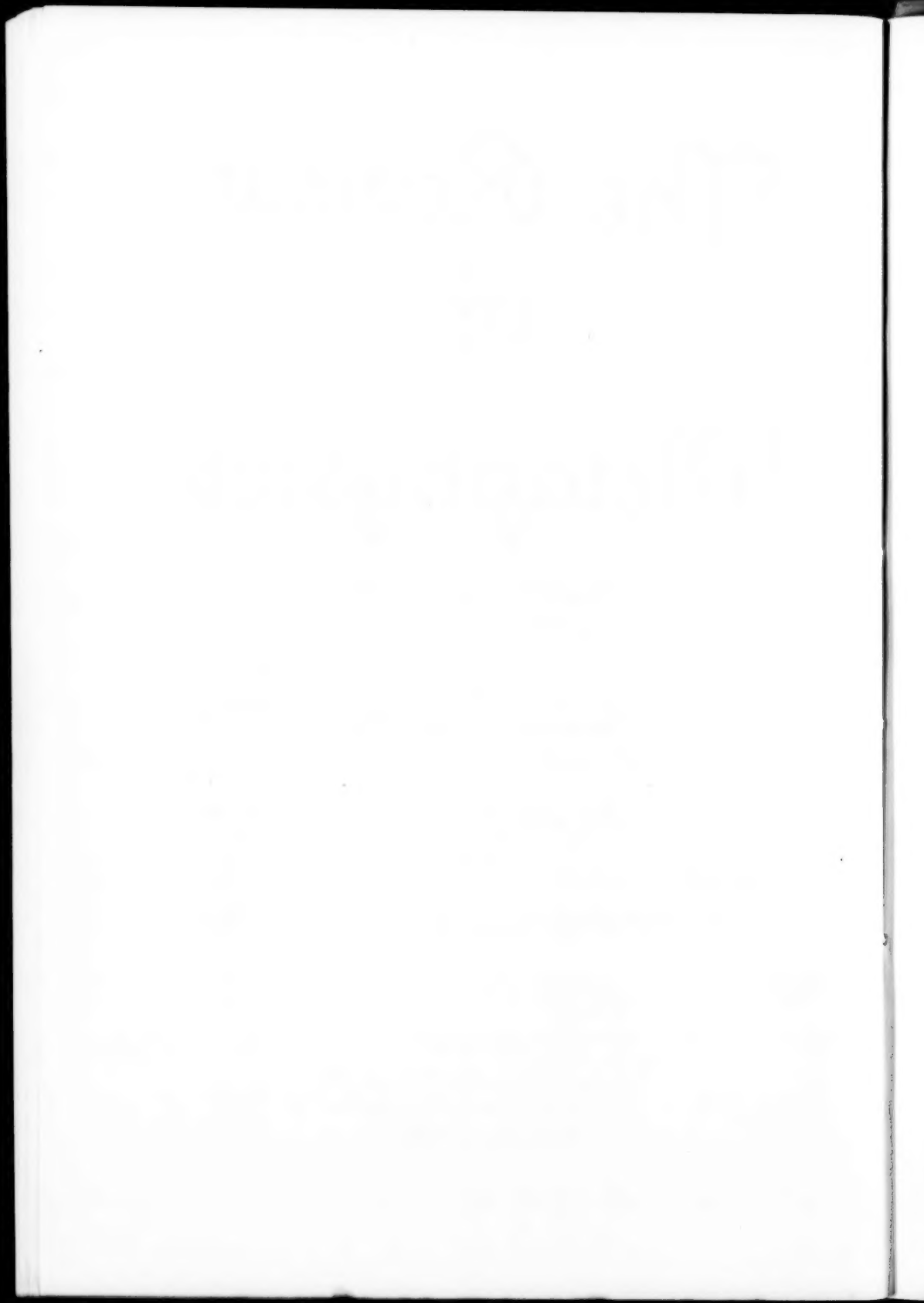
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